NEEDHAM PLANNING BOARD Wednesday May 20, 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. De Minimus Change: Major Project Site Plan Special Permit No. 2009-06: Needham Farmer's Market, Inc., 28 Perrault Road, Apt. #1, Needham, MA 02494 and Town of Needham, 1471 Highland Avenue, Needham, MA, Petitioners. (Property located at 1471 Highland Avenue, Needham, Massachusetts).
- 2. De Minimus Change: Amendment to Major Project Site Plan Special Permit No. 2007-10: Beth Israel Deaconess Hospital-Needham, Inc., 148 Chestnut Street, Needham, MA, Petitioner (Property is located at 148 Chestnut Street, Needham, MA 02492).
- 3. Presentation: proposed new use at 100 West Street. Redevelop and zoning change of the property to enable an 83 unit Assisted Living and Alzheimer's/Memory Care facility and 71 Independent Living Apartments.
- 4. Discussion of Annual Town Meeting zoning articles.
- 5. Dining opportunities to support local restaurants: Review of regulatory hurdles and opportunities for expanded outdoor dining to restart the economy.
- 6. Highway Commercial 1 Zoning Initiative: Next steps.
- 7. Discussion of Summer Schedule.
- 8. Minutes.
- 9. Correspondence.
- 10. Report from Planning Director and Board members.

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

2020 APR 23 PM 4: 24

TOWN OF NEEDHAM MASSACHUSETTS



500 Dedham Avenue Needham, MA 02492

PLANNING BOARD

APPLICATION TO AMEND SITE PLAN REVIEW SPECIAL PERMIT APPLICATION NO. 2009-06 (APRIL 25, 2017)

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: Garrity's Way and part of Town Common next to central walkway, 1471 Great Plain Avenue, Needham, MA 02492

Applicant's' names, addresses, phone numbers:

Needham Farmers Market ("NFM"), 28 Perrault Road, Apt. #1, Needham, MA 02494; 781.241.2037

Applicants are:

Owner __

Tenant

Agent/Attorney x_

Purchaser

Property Owners' Names, Addresses, Telephone Numbers:

Town of Needham, 1471 Highland Avenue, Needham, MA 02492, tel. 781.455.7500

Characteristics of Property:

Lot Area 59,221 sq. ft. Present Use: Driveway & parking, Town Common

Map # 51 Parcel #1

Zoning District: Center Business

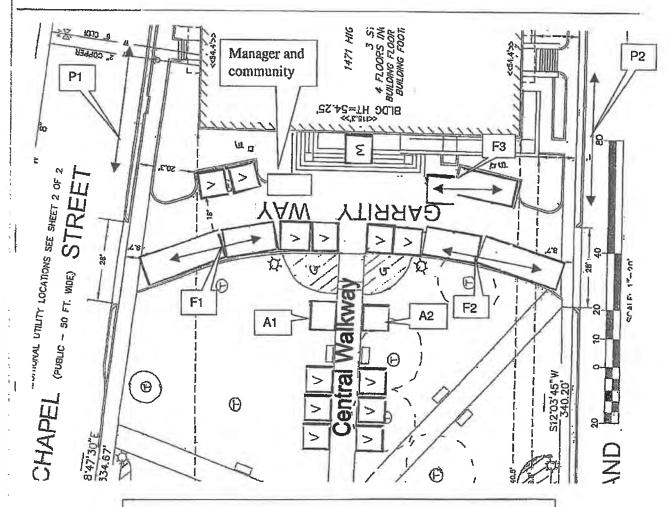
Description of Project for Site Plan Review under Section 7.4 of the Zoning By-Law:

- For 2020, NFM will expand from Garrity's Way to include a small part of the Town Common beside the central walkway leading to Garrity's Way. See attached Market Diagram for 2020.
- NFM will have a maximum of fifteen (15) food vendors per market. This is an Increase of two food vendors per market.

- NFM will have a maximum of four (4) artists per market. This is an increase of two
 artists per market. NFM will have up to four canopies (booths) for artists, musicians,
 NFM Market Manager, and Needham nonprofits (which share a canopy with the Market
 Manager).
- Setup time for vendors and artists will start at 9:00 a.m. (previously 10:00 a.m.) and end at 12:00 noon, when NFM opens for business.
- Temporary parking for two vehicle spaces on Highland Avenue next to Garrity's Way during setup and breakdown for vendors and artists. See Market Diagram for 2020.

SUMMARY OF PLANNING	DUARU AGIION	
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Needham Farmers Market 2020



F1 - MacArthur Farm (produce)

F2 - Neighborhood Farm (produce)

F3 - Chestnut Farm (meat)

V - Food Vendors

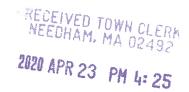
A1 - Artists (2)

A2 - Artists (2)

P1 – Existing temporary parking on Chapel Street for vendors and artists during setup and breakdown

P2 - Proposed temporary parking on Highland Avenue for vendors and artists during setup and breakdown

M - Musicians



April 23, 2020

Needham Planning Board PSAB 500 Dedham Ave. Needham, MA 02492

Re: Application to Amend Special Permit by Needham Farmers Market
Major Project Site Plan Review Special Permit, App. No. 2009-06 (April 25, 2017)

Dear Planning Board Members:

The purpose of this letter is to provide the Planning Board with additional information for the Application of Needham Farmers Market ("NFM" or the "Market") to amend its Special Permit to operate in Needham for its ninth season. These amendments, limited in scope, are explained as follows:

1. For its 2020 season on Sundays, NFM will continue to use Garrity's Way and additionally to use a small part of the Town Common beside the central walkway leading to Garrity's Way. See attached Market Diagram for 2020.

Under the amended Special Permit, there is a unity and commonality of Garrity's Way and the Town Common area beside the central walkway. Both of these are adjacent to each other and both are located in Parcel 1 on Assessors Plan No. 51. See Special Permit Decision on page 1, first paragraph.

2. Four existing vendors will move from Garrity's Way in front of the stairway at Town Hall to beside the central walkway. Due to the musicians playing directly behind them, these vendors during the past three seasons have had great difficulty talking to their customers. Two new vendors will also be located beside the central walkway. NFM will then have a maximum of fifteen (15) food vendors per market for 2020. See Market Diagram.

NFM has attracted many new Needham shoppers in the last three seasons due to its central location on Garrity's Way. Our shoppers have asked for more vendors, and with a greater variety of food.

3. The two artists existing under the Special Permit, who are usually Needham adults or teenagers, will move from Garrity's Way to beside the central walkway. Two new artists will join these artists for a maximum of four (4) artists per market. Artists might share a tent. See Market Diagram.

In the past three seasons, the artists have complained about very limited space to exhibit and sell. Also, their Needham customers dislike the cramped space for the same reason.

Many residents, including a group of seniors, regularly attend the Market to see what the artists make and sell. Needham artists at NFM are very popular, and the shoppers have continually asked for more artists.

- 4. Vendor setup on Sunday mornings occurs from 10 a.m. to 12 noon. Under this schedule, the produce vendors do not have sufficient time to unload, erect tents, and arrange produce on tables. NFM would change setup hours to begin at 9:00 a.m. NFM will stagger setup time to allow for an orderly and safe process.
- 5. Logistics and a safe process during setup and breakdown would greatly improve if some vendors and artists would have temporary parking available for two vehicle spaces on Highland Avenue next to Garrity's Way. See Market Diagram.

Relevant to this amendment, vendors at the Needham Harvest Fair are directed to offload tents and equipment on Highland Ave. at Garrity's Way during setup and reload during breakdown at the same location.

- 6. NFM will work with the Needham DPW and Ed Olson, Superintendent of Parks and Forestry, to protect the grass on the Town Common. I met briefly with Ed to discuss the expanded location on the Town Common. He was agreeable for 2020, and he will review the effect during this season. The Town Common is scheduled for renovation in 2021.
- 7. NFM vendors bring to Needham: fresh, locally sourced, healthy, and safe products, e.g. produce, meat, seafood, bread and other baked goods, etc. NFM benefits local agriculture with three farm vendors.

At its weekly markets, NFM offers additional benefits to the Needham community including live music from local musicians and Needham nonprofits at our community table.

- 8. For Needham residents on unemployment compensation and public welfare, seniors on fixed incomes (Social Security), and public housing residents, they all rely upon NFM as an important food source. They might utilize the state SNAP EBT and WIC programs. Eligible residents may use state funded Senior Coupons to buy produce from NFM farm vendors.
- 9. On March 23, 2020, Governor Baker recognized the essential function that farmers markets provide to Massachusetts residents in order for them to obtain fresh and locally sourced food (including Massachusetts farms), especially now, when he deemed them "Essential Services" exempt from workplaces required to close due to COVID-19. Three local farms are vendors at NFM at every market.

10. On March 26, 2020, the Massachusetts Department of Agricultural Resources issued the attached Guidance Memo #5 for farmers markets, farm stands, and CSAs, involving the coronavirus and COVID-19. Guidance Memo #5 states the following on page 1:

Farmers' markets and farm stands (including Community Supported Agriculture farm stands (CSAs)) are primary sales outlets for many Massachusetts farms. Maintaining and increasing access to local food is essential, particularly in times of unsteadiness. Local farming may fill a critical void in food distribution patterns if the response to COVID-19 increases and growing areas located in the Western U.S. experience production and distribution challenges. The Massachusetts Department of Agricultural Resources, along with its State and Federal partners, are focused on enabling farm stands and farmer markets to sell safe, healthy and local products during the COVID-19 response. Our aim continues to be the support of the many farms that will be entering he production season so they are able to provide fresh farm products to the residents, retail markets and restaurants in the Commonwealth.

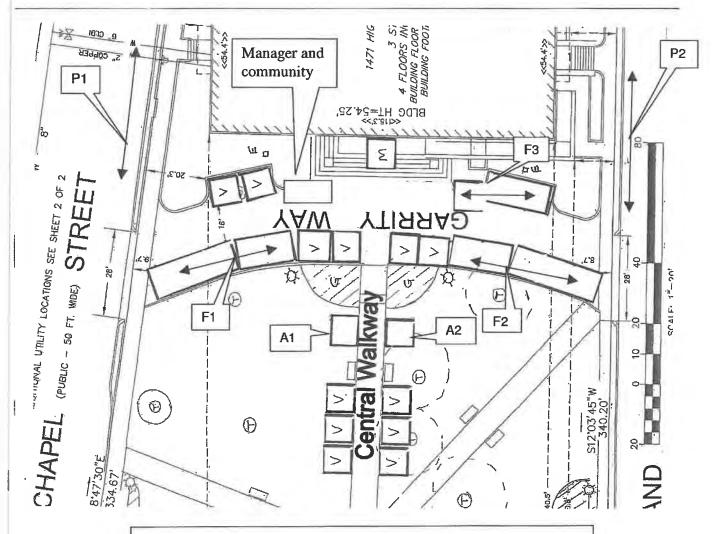
- 11. NFM has discussed specific, operational safety procedures for vendors and customers and how these procedures will implement the MDAR Guidance Memo #5 with the Needham Public Health Department. It determined that NFM complied with Guidance Memo #5.
- 12. For its ninth season, NFM is scheduled to open on Sunday, June 14, 2020 and close on the Sunday before Thanksgiving, November 22, 2020.
- 13. The License Agreement between the Town of Needham and Needham Farmers Market will be forthcoming.

Sincerely,

Jeffrey M. Friedman

President, Needham Farmers Market

Needham Farmers Market 2020



- F1 MacArthur Farm (produce)
- F2 Neighborhood Farm (produce)
- F3 Chestnut Farm (meat)
- V Food Vendors
- A1 Artists (2)
- A2 Artists (2)
- P1 Existing temporary parking on Chapel Street for vendors and artists during setup and breakdown
- P2 Proposed temporary parking on Highland Avenue for vendors and artists during setup and breakdown
- M Musicians

THE COMMONWEALTH OF MASSACHUSETTS

EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS



Department of Agricultural Resources

251 Causeway Street, Suite 500, Boston, MA 02114 617-626-1700 fax: 617-626-1850 www.mass.gov/agr



CHARLES D. BAKER Governor KARYN E. POLITO Lt. Governor KATHLEEN A. THEOHARIDES Secretary

JOHN LEBEAUX Commissioner

Bulletin: 2020-05

FARMERS' MARKETS, FARM STANDS, & CSAs Guidance Memo #5

Considerations for Fruit and Vegetable Growers Related to Coronavirus & COVID-19

The current COVID-19 pandemic is a common concern and many are wondering what they can and should do. The information here is intended to help guide the fruit and vegetable farming community. If you have concerns or suggestions please contact the MDAR Produce Safety Team at Michael.Botelho@mass.gov or via phone at (508) 985-8751, or UMASS Agricultural Extension Vegetable Program at lmckeag@umass.edu or via phone at (413) 545-1051.

Background

COVID-19 is the disease caused by the SARS-CoV-2 virus ("the novel coronavirus"). Symptoms include fever, cough, and shortness of breath and may appear 2-14 days after exposure. While the majority of COVID-19 illnesses are mild, it can result in severe and fatal illness, particularly in the elderly and among those with severe underlying health conditions. Federal and State agencies are working hard to better understand the virus, how to control its spread, and how to treat those infected. One of the key things we can all do is to limit and slow the spread of COVID-19 to provide time for this understanding to develop and to not overwhelm the medical system. Much more information is available at the CDC Situational Summary page.

Foodborne Exposure to COVID-19 (As of 3/24/20)

Unlike foodborne gastrointestinal (GI) viruses like norovirus and hepatitis A that often make people ill through contaminated food, SARS-CoV-2, which causes COVID-19, is a virus that causes respiratory illness. Foodborne exposure to this virus is not known to be a route of transmission.

The virus is thought to spread mainly from person-to-person. This includes between people who are in close contact with one another (within about 6 feet), and through respiratory droplets produced when an infected person coughs or sneezes. These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs. It may be possible that a person can get COVID-19 by touching a surface or object that has the virus on it and then touching their mouth, nose, or possibly their eyes, but this is not thought to be the main way the virus spreads. Please visit www.fda.gov/food/food-safety-during-emergencies/food-safety-and-coronavirus-disease-2019-covid-19 for further information on COVID-19 and food.

Farmers' Markets/Farm Stands/CSAs in Massachusetts

Farmers' markets and farm stands (including Community Supported Agriculture farm stands (CSAs)) are primary sales outlets for many Massachusetts farms. Maintaining and increasing access to local food is essential, particularly in times of unsteadiness. Local farming may fill a critical void in food distribution patterns if the response to COVID-19 increases and growing regions located in the Western U.S. experience production and distribution challenges. The Massachusetts Department of Agricultural Resources, along with its State and Federal partners, are focused on enabling farm stands and farmer markets to sell safe, healthy and local products during the COVID-19 response. Our aim continues to be the support of the many farms that will be entering the production season so they are able to provide fresh farm products to the residents, retail markets and restaurants in the Commonwealth.

What are some best practices for farmers' markets/farm stands and other local produce/farm product disbursement sites to limit the spread of COVID-19?

- 1. Social Distancing: Market managers should increase the space between vendors to assist in patron flow and reduce crowding at vendor stations. Setting up vendor tables in a straight run or "L" formation should assist visitors in maintaining a safe distance as they visit the market. Market managers may also consider limiting the number of customers who can enter the market space at one time based on visitation rates. Markets are strongly encouraged to remind customers of "social distancing", maintaining a space of at least six feet from one another while shopping at farmers markets, through signage at prominent locations and vendor tables and through verbal reinforcement. As a reminder, Market staff, vendors and customers should:
 - 1) Avoid close contact with people who are sick.
 - 2) Avoid touching your eyes, nose, and mouth.
 - 3) Stay home from the market when you are sick.
 - 4) Cover your cough or sneeze with a tissue, then throw the tissue in the trash.
 - 5) Clean and disinfect frequently touched objects and surfaces.
- 2. Product Samples: Farmers' markets should eliminate the offer of samples of products to reduce opportunities for contamination during COVID-19 response in the Commonwealth.
- 3. Minimize the Number of Touches: Market managers and vendors should minimize the handling of produce and products by both staff and customers disallowing the touching of produce at vendor tables and sales points. Vendors are encouraged to facilitate reduced handling by utilizing small produce/product displays and lists on signage or chalkboards to communicate product lists and availability while keeping produce for sale in larger bins that are covered and out of reach of customers. Online ordering via email or pre-bagged orders are options that can be considered by markets/vendors as well as drive-up systems.
- 4. The use of reusable bags: Farmers' market managers, market staff, as well as vendors and their employees, shall not perform bagging of produce if reusable bags are utilized until further notice. Vendors may choose to use recyclable paper bags, compostable plastic bags or single-use plastic bags during COVID-19 response operations in the Commonwealth.
- 5. Should farms/vendors be disinfecting produce? As noted above, there is no indication that COVID-19 is transmitted via produce. The virus is thought to be spread mainly from person to person according to the CDC. For most farms the level of operational change and amount of disinfectant needed to disinfect produce is unrealistic. If you are using a disinfectant on produce, please follow the instructions located on the label of the product to find directions on the proper use of the product.
- Market/Vendor Display cleaning/sanitizing: Vendors are encouraged to limit the use of tablecloths in order to make it easier to clean and sanitize table surfaces, or utilize a sheet of clear plastic over the top of the tablecloth to facilitate increased cleaning and sanitizing of contact surfaces. Vendors should clean and sanitize their displays, including their tables and items used to display produce in, at the end of every market and at intervals during market operation. Markets are recommended to discontinue the use of display items that cannot be cleaned and sanitized. The virus that causes coronavirus disease (COVID-19) can be stable for several hours to days on surfaces, up to 24 hours on cardboard and up to two to three days on plastic and stainless steel https://www.nih.gov/news-events/news-releases/new-coronavirus-stable-hours-surfaces.
- 7. Can Markets/vendors use bleach as a sanitizing agent on contact surfaces? Yes, you can also follow the CDC guidance and use a mixture of bleach and water (5 tbsp per gallon or 4 tsp per quart).
- 8. What should Markets/CSAs and vendors use for disinfection and sanitizing? The EPA has provided a list of disinfectants for use against SARS-CoV-2, the virus causing COVID-19. Very few of these products are common on the farm and may be hard to find. If you are currently using a sanitizer as part of a standard cleaning and sanitizing procedure for hard surfaces on your farm, you can use the produce at Market or on bins and containers

used for CSA deliveries. Consider reviewing the label for that product and using it for disinfection of specific high-touch surfaces if applicable.

- 9. Hand washing/hygiene: Markets are encouraged to make available supplies for event staff and participants to promote personal hygiene practice during COVID-19 response, including but not limited to portable sinks equipped with soap and paper towels, hand sanitizers and paper towels. Hand washing stations can be brought in by the market for customer and vendor use. Hand sanitizer stations can be useful, though should not be used as a replacement for handwashing. (Masks are not recommended for healthy adults unless they are caring for someone with COVID-19.)
- 10. Gloves: Market managers, staff and vendors <u>must utilize disposable gloves at all times</u> during market/CSA operations. Gloves can provide a barrier between hands and produce, preventing transmission of pathogens. They can also be a good reminder not to touch your face. Remember however, that gloves can be a source of contamination if not used properly. Follow <u>CDC glove removal guidelines</u>. Please remember to <u>follow hand washing guidelines</u> recommended by the CDC before putting on gloves and between glove change-outs.
- 11. Money Handling: Markets and vendors should minimize cash transactions. If more than one person is working the table, vendors should designate one person to handle money and another to handle produce/product. Vendors can round their prices to the nearest dollar so they can reduce the acceptance of coins, and minimize the handling of change. Wipe down credit card readers and POS equipment periodically and between transactions. Online payment application platforms used on smartphones, such as Venmo or PayPal, are a viable option to facilitate transactions at markets and farm stands.
- 12. Establish Relationships: Communicate with key community partners such as local health departments and the site host of your market and collaborate with them on broader planning efforts during COVID-19 response.
- 13. Plan for Cancellations: Identify actions to take if you need to cancel the market, such as communications with customers and vendors. Share planned closure communication strategy and channels with vendors in advance. If you do need to close, consider alternative ordering and distribution methods. Consider suspending penalties for last minute vendor cancellations.
- 14. Customer/Consumer Education and Outreach: Keep market staff, vendors and customers updated on market information and guidelines and ensure folks who are sick stay home. Emphasize that protecting public health is paramount to your market and describe any changes to market procedures to prevent the spread of infection. Use health messages and materials developed by credible public health sources such as your local public health department, the Massachusetts Department of Agricultural Resources, the Massachusetts Department of Public Health or CDC/NIH to encourage your event staff and participants to practice good personal health habits. Let your customers know what steps you are taking to keep them and your market venue/farm stand/CSA safe.

Future Updates

This information is based on what we know now and will be updated as we learn more. Please visit www.mass.gov/resource/information-on-the-outbreak-of-coronavirus-disease-2019-covid-19 for updates.

May 12, 2020

Needham Planning Board PSAB 500 Dedham Ave. Needham, MA 02492

Re: Application to Amend Special Permit by Needham Farmers Market
Major Project Site Plan Review Special Permit, App. No. 2009-06 (April 25, 2017)

Dear Planning Board:

In support of Needham Farmers Market's Application to Amend Special Permit, this letter is to inform you that NFM and the Needham Public Health Department have agreed to a NFM Diagram and an operations plan for 2020, involving health and safety. This is attached.

Needham Farmers Market removes from its Application to Amend Special Permit the following: two new vendors per market day proposed in paragraph 2; and two new artists per market day proposed in paragraph 3. Paragraphs 2 and 3 are deleted.

Under the agreement with the Public Health Department, musicians are eliminated from NFM. Furthermore, artists at a farmers market would not be allowed until Governor Baker would allow it, consistent with the Public Health Department. NFM complies with all Town of Needham and Massachusetts requirements. We work closely with the Public Health Department.

Sincerely.

Jeffrey M. Friedman

Jephy M. Friedman

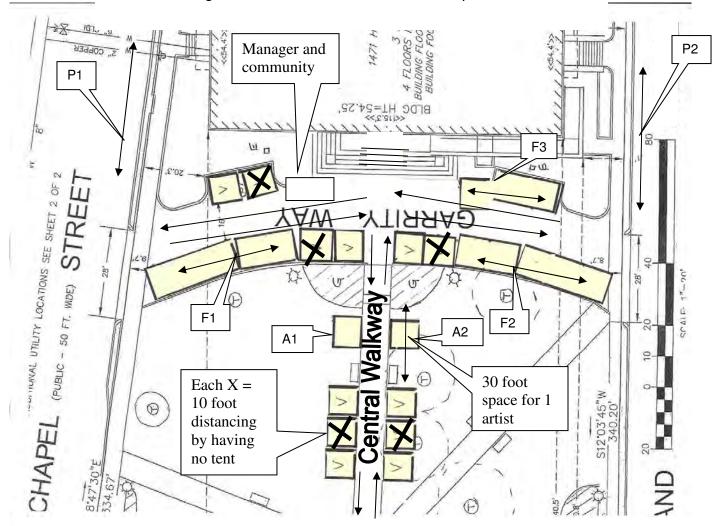
President, Needham Farmers Market

Thomas G. Gehman

NFM Board Member and Operations Manager.

Needham Farmers Market 2020

Configuration shown based on current requirements



F1 – MacArthur Farm (produce) F2 – Neighborhood Farm (produce)

F3 – Chestnut Farm (meat) V – Food Vendors

A1 – Artists (1)

A2 - Artists (1)

Note for A1, A2, we will follow the governor's designation of vendors for farmers markets and not allow non-essential vendors as pertaining to farmers markets such as in the case of artists.

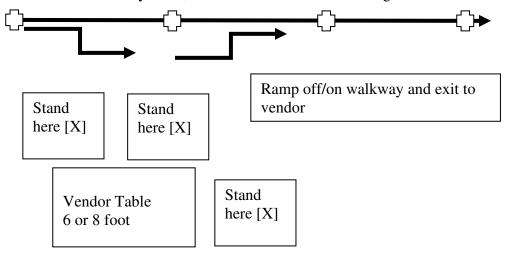
- P1 Proposed temporary parking on Chapel Street for vendors and artists during setup and breakdown
- P2 Proposed temporary parking on Highland Avenue for vendors and artists during setup and breakdown

Directional walkways

The Needham Farmers Market will configure to meet the health and safety requirements in effect on the market day.

Detailed Description:

Concept of Directional Walkway Flow, Marked with Social Distancing Indicators



Contactless order fulfillment will be:

- 1. Vendors will be strongly encouraged to offer online payment such as PayPal, Venmo, square, etc and prepaid ordering.
- 2. Vendors will have prepaid order pickup at tableside with distancing markers.
- 3. Vendors will fill orders at table side with customer distancing markers, sanitized card handling, and sanitary cash handling.
- 4. Vendors will be strongly encouraged to price in whole dollars and eliminate making change as much as possible.

To maintain distancing and density these practices will be in effect

- 1. The vendors will be arranged to place a 10-foot distance between tents.
- 2. NFM staff people will monitor the shoppers and advise on distancing and safety.
- 3. Movement of the shoppers through the market will be organized into walkways and vendor exit ramps. This will be marked by caution tape and signs.

Safety requirements for shoppers will be:

- 1. Facemasks required on all.
- 2. No reusable bags
- 3. 6-foot social distancing.
- 4. Do not enter the market if sick
- 5. Adults only.
- 6. No pets

Safety requirements on vendors will be:

- 1. Agreement for safe employee behavior such as don't work if sick
- 2. Employees are masked and gloved.
- 3. Sanitizer and wipes will be available at all sales tables and equipment kept sanitized.
- 4. No tablecloths, only hard surface tables that can be cleaned with sanitizer.

Setup Time proposed 9 AM to noon, instead of the prior year's 10 AM - noon

- 1. Needed to manage the times for safe operation of farm trucks in Garrity way.
- 2. Needed to place markers and guide signs in the market space for health and safety purposes.

Customer Management

- 1. Needham Farmers Market staff will help customers move along so as not to linger in groups.
- 2. Needham Farmers Market staff will monitor density of people in the market and control entry of customers so as to maintain social distancing.

License Agreement Between Needham Farmers Market, Inc. and The Town of Needham

This License Agreement is made this <u>31</u> day of __, 2018, by and between the Needham Farmers Market Inc., a not for profit corporation, with it principal place of business at 28 Perrault Rd, Apt.1, Needham, MA 02494, (LICENSEE), and the Town of Needham, Massachusetts, a municipal corporation with its usual place of business at 1471 Highland Ave., Needham, MA 02492 (LICENSOR).

1. USES

- a. In consideration of the full and faithful performance by LICENSEE of all covenants and agreements contained herein and subject to the following terms and conditions, the LICENSOR grants to LICENSEE and LICENSEE takes from the LICENSOR the non exclusive right to use, to operate a Farmers Market in Garrity Way (paved driveway in front of Town Hall "Licensed Area") for four (4) hours every Sunday, opening at 12:00 noon and closing at 4:00 p.m. from the last Sunday in May through the last Sunday in November. The LICENSEE will be allowed up to two (2) hours before opening to allow its vendors to set up and up to two (2) hours after closing to break down and clean up.
- b. Vendors will use booths, tables, canopies or other temporary structures on the site, with a maximum of thirteen (13) vendors. In addition to the vendors there shall be allowed five tables, booths or canopies for the Needham Community Farm or other Needham not for profit organizations, artists, artisans, musicians and the LICENSEE which are to be located solely in Licensed Area.
- c. Free musical entertainment will be allowed. Amplification will be allowed as long as it is reasonable, not disruptive to neighbors and sound does not extend beyond the property.
- d. All trash and waste will be confined to the Licensed Area, and the LICENSEE will be responsible for its removal and cleaning of the Licensed Area before the end of the breakdown time.
- e. LICENSEE is responsible to see that the physical layout of the market is kept within Licensed Area and does not enter the Town Common.
- f. LICENSEE will ensure that no public vehicular access to Garrity Way is allowed during Market hours. This can be achieved by blocking off the Chapel Street and Highland Avenue entrance/exits with yellow tape, traffic cones or other similar means.
- g. LICENSEE is responsible to see that the Licensed Area is used in a lawful manner and in compliance with all laws, by-laws, rules, regulations, permit requirements, orders and directives of any government official, agency or entity of competent jurisdiction. LICENSEE will not engage in or allow any of its vendors or invitees to

engage in any unlawful or dangerous activities that may cause personal injury or physical damage to the Licensed Area.

h. LICENSEE agrees to suspend Market activities in the event that the Town requires use of Garrity Way. The LICENSOR will endeavor to provide as much prior notice as possible to the LICENSEE. Except in extraordinary circumstances, the LICENSOR will provide the LICENSEE two weeks' notice of the need for Market activity suspension. The Town will work with the Market to attempt to locate an alternative site for the Market during any period of suspension

2. PLANS

The LICENSEE shall provide the LICENSOR with a plan (PLAN) of the layout of Garrity Way to be used for the market which shall be the Licensed Area and be attached to this agreement.

3. TERM OF AGREEMENT

The term of this License Agreement shall be May 27, 2018 through November 24, 2019.

4. FEE

LICENSEE shall pay the Town of Needham the sum of \$25.00 per market day, for each day, payable in advance. The Town of Needham reserves the right to terminate this License Agreement if LICENSEE'S payment becomes more than five (5) days overdue.

5. TERMINATION

In addition to the LICENSOR'S right in paragraph 4 above to terminate for cause, any party may terminate this License Agreement without cause, effective at the end of each monthly period, upon 30 days written notice to the other party of its intention and election to terminate.

6. MAINTENANCE

It is agreed the Town of Needham will patch, plow and sweep the Licensed Area as needed and at reasonable times. The LICENSEE shall not permit the Licensed Area to be overloaded, damaged, stripped or defaced, nor suffer any waste. The LICENSEE shall not allow any holes to be made in the Licensed Area.

7. OWNERSHIP OF PROPERTY

It is agreed that the Licensed Area is and shall remain the property of the LICENSOR and the LICENSEE shall not make any improvements on, alter or remove any part of the Licensed Area without the LICENSOR'S express prior written consent.

8. CONDITION OF LICENSED AREA

LICENSEE acknowledges that: a) it has inspected the Licensed Area; b) the Licensed Area shall be available under this License Agreement to LICENSEE and its vendors in an "as is" condition; and c) the LICENSOR makes no representations or warranties as to the condition of the Licensed Area.

9. RISK OF LOSS

LICENSEE agrees to use the Licensed Area at its sole risk. All merchandise, property and effects of the LICENSEE, its vendors, and of all persons claiming by, through or

under LICENSEE, which may be on the Licensed Area during the Term of this License Agreement shall be at the sole risk and hazard of the LICENSEE, its vendors, or its invitees. LICENSEE further agrees that the LICENSOR shall not be responsible or liable to LICENSEE, its vendors, or to those claiming by, through or under LICENSEE, for any loss or damage resulting to LICENSEE, its vendors, or those claiming by, through or under LICENSEE or its or their property, that may be occasioned by or through the acts or omissions of persons for whose conduct the LICENSOR is not responsible. The LICENSEE shall be responsible for any damage done to the Licensed Area resulting from the activities allowed by this License Agreement.

10. INSURANCE

LICENSEE and its vendors shall, at their own expense, obtain and maintain general liability and motor vehicle liability insurance policies protecting the LICENSOR and shall have the LICENSOR as an additional named insured on the policies. General liability coverage shall be in the amount of at least \$1,000,000 per occurrence, and \$2,000,000 aggregate for bodily injury liability and property damage liability. Motor vehicle coverage shall include coverage for owned, hired and non-owned vehicles and shall be in the amount of at least \$1,000,000 single limit.

11. INDEMNIFICATION

LICENSEE shall pay, protect, indemnify and save harmless the LICENSOR from and against all liabilities, losses, damages, costs, expenses (including reasonable attorneys' expenses and fees), causes of action, suits, claims, demands or judgments of any nature whatsoever that may be imposed upon or incurred by or asserted against the LICENSOR by reason of any of the following acts occurring or arising during the term of this License Agreement:

- a. Any accident, injury to, or death of any person or damage to property occurring on the Licensed Area or any part thereof in which the negligence of LICENSEE, its employees, any of its employees, vendors or any person acting under color of this license is a causative factor and in which the negligence of the LICENSOR, its employees and agents is not a causative factor; or
- b. Any failure by LICENSEE, its vendors, its employees, or anyone acting under color of this License Agreement to perform or comply with any of the terms hereof or any contracts, agreement, or restrictions, statutes, laws, ordinances or regulations affecting the Licensed Area or any part thereof or the ownership, occupancy or use thereof.

12. NON-ASSIGNABLE

LICENSEE shall not assign this License Agreement or any rights hereunder without the prior written consent of the LICENSOR.

13. LICENSE ONLY

LICENSEE acknowledges that this is a License Agreement and the rights to use of the licensed area hereunder shall be deemed to be a license only and shall not be construed to be a lease, joint venture, partnership or as evidencing any relationship between LICENSEE and the LICENSOR other than as LICENSEE and LICENSOR. No interest in real property is hereby conveyed by the LICENSOR to the LICENSEE.

14. ENTIRE AGREEMENT

This document forms the entire agreement between the parties and there are no other agreements between the parties. Any amendment or modification to this License Agreement must be in writing and signed by an official with the authority to bind the Town.

15. GOVERNING LAW

This License Agreement and performance hereunder are governed in all respects by the laws of the Commonwealth of Massachusetts and all other applicable by-laws and administrative rules, regulations and orders.

16. CONSENT TO VENUE

The parties hereto agree that all actions or proceedings arising in connection with this Agreement shall be tried and litigated exclusively in the Dedham District Court located in the County of Norfolk, State of Massachusetts, subject to the Transfer rules of the Norfolk Superior Court. The aforementioned choice of venue is intended by the parties to be mandatory and not permissive in nature, thereby precluding the possibility of litigation between the parties with respect to or arising out of this Agreement in any court or forum other than that specified in this paragraph. It is further agreed that the parties to this Agreement hereby waive their rights to a jury trial.

IN WITNESS WHEREOF the parties hereto have executed two copies of this License Agreement as of the date first above written.

LICENSOR,

Town of Needham.

By: Town Manager

LICENSEE,

Needham Farmers Market, Inc.

My Fresident, Mulham Formers Market, Inc.



The Commonwealth of Massachusetts Executive Office of Health and Human Services Department of Public Health 250 Washington Street, Boston, MA 02108-4619

MARYLOU SUDDERS Secretary

MONICA BHAREL, MD, MPH Commissioner

> Tel: 617-624-6000 www.mass.gov/dph

ORDER OF THE COMMISSIONER OF PUBLIC HEALTI FOR FARMERS MARKETS, FARM STANDS AND CSAS

On March 10, 2020, Governor Charles D. Baker declared a state of emergency in the Commonwealth to respond to the spread of COVID-19. On March 11, 2020, in view of the grave threat that the spread of COVID-19 presents to the public health, the Public Health Council authorized and directed me to act pursuant to G. L. c. 17, § 2A and to take all appropriate actions, incur such liabilities, and establish such rules, requirements, and procedures necessary to prepare for, respond to, and mitigate the spread of COVID-19 in order to protect the health and welfare of the people of the Commonwealth.

On March 23, 2020, the Governor issued an Order Assuring Continued Operation of Essential Services in the Commonwealth. As designated in the list of "COVID-19 Essential Services," farmers markets, farm stands and CSAs are essential and will remain open. Additionally, farmers' market employees, farm stand employees and CSA employees are deemed essential workers.

Therefore, in order to ensure access to a strong local food supply and enable farms to continue to grow, harvest and market safe, healthy and local fruits and vegetables, while additionally reducing exposure of shoppers and employees to COVID-19, and pursuant to the authority granted by G. L. c. 17, § 2A and with the approval of the Governor and the Public Health Council, I hereby issue the following Orders:

- 1) As indicated in the list of "COVID-19 Essential Services", farmers markets, farm stands and CSAs may remain open.
- 2) Managers of Farmers' Markets must limit the number of customers who can enter the market space at one time. Market Managers and individual vendors operating within a Farmers' Market must remind customers of "social distancing", maintaining a space of at least six (6) feet from one another while shopping at indoor or outdoor Farmers Markets, through signage at prominent locations and vendor tables, at access points and through verbal reinforcement.
- 3) Market managers and staff should cordon off farmers' market perimeters to allow for clear entry and egress points.

- 4) Market managers and staff must monitor and control the number of customers allowed within farmers' market areas and must allow no more than 10-15 customers per 1,000 square feet at any one time.
- 5) Lines that form outside of market entry points must be monitored and set-up in a way that customers maintain recommended distances between each other while waiting.
- 6) Market managers must employ signage, floor marks and cones to direct customers to maintain spacing requirements.
- 7) Local law enforcement should be notified and consulted if any issues arise concerning distancing or other physical security concerns at the market.
- 8) Signs must be posted to remind staff and customers that they should not visit the market when they are sick.
- 9) Market managers, staff and vendors must clean and disinfect frequently touched objects and surfaces.
- 10) Farmers' markets, retail stands and CSAs are encourage to promote transactions that employ pre-bagging of produce, online-orders and other methods that limit public interaction and minimize the time customers spend at vendor tables to enable customer flow and the maintenance of distancing guidelines.
- 11) Farmers' markets may not offer product samples for on-site use or tasting in order to reduce opportunities for contamination and transmission of the virus.
- 12) Market managers and vendors should minimize the handling of produce and products by both staff and customers, and prohibit the touching of produce by customers at vendor tables and sales points.
- 13) Farmers' market managers, market staff, as well as vendors and their employees, shall not perform bagging of produce if reusable bags are utilized until further notice. Vendors may choose to use recyclable paper bags, compostable plastic bags or single-use plastic bags during COVID-19 response operations in the Commonwealth
- 14) Vendors should not use tablecloths in order to make it easier to clean and sanitize table surfaces. Vendors must clean and sanitize their displays, including their tables and items used to display produce at the end of every market during market operation. Markets are recommended to discontinue the use of display items that cannot be cleaned and sanitized.

- 15) Markets are encouraged to provide access to handwashing facilities, including those available in public restrooms, and alcohol based hand sanitizers for event staff and participants.
- 16) Market managers, staff and vendors must utilize face coverings or masks, as well as disposable gloves, at all times during market/CSoA operations. Customers are strongly encouraged to use masks or face coverings as per the CDC guidance.
- 17) Markets and vendors should minimize cash transactions. If more than one person is working the table, vendors should designate one person to handle money and another to handle produce/product.

This Order shall be effective immediately and shall remain in effect until the State of Emergency is terminated by the Governor, or until rescinded by me, whichever shall happen first.

IT IS SO ORDERED.

Monica Bharel, MD, MPH

Commissioner, Massachusetts Department of

Public Health April 27, 2020



TOWN OF NEEDHAM, MALIVED TOWN STULL

PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT

2017 APR 200 Pedbar Ave Needham, MA 02492 781-455-7550

PLANNING

MAJOR PROJECT SITE PLAN REVIEW SPECIAL PERMIT AMENDMENT TO DECISION Application No. 2009-06

Needham Farmers Market, Inc. Town of Needham April 25, 2017

(Original Decision dated November 17, 2009, amended March 2, 2010, November 16, 2010, November 16, 2010, June 21, 2011 and May 1, 2012)

DECISION of the Planning Board (hereinafter referred to as the Board) on the petition of Needham Farmers Market, Inc., 28 Perrault Road, Apt. #1, Needham, MA 02494 and Town of Needham, 1471 Highland Avenue, Needham, MA, (hereinafter referred to as the Petitioner) for property located at 1471 Highland Avenue, Needham, Massachusetts. Said property is shown on Assessors Plan No. 51 as Parcel 1 containing 59,221, square feet in the Center Business District.

This Decision is in response to an application submitted to the Board on March 16, 2017 by the Petitioner for: (1) a Major Project Site Plan Special Permit amendment under Section 7.4 of the Needham Zoning By-Law (hereinafter the By-Law) and Section 4.2 of Major Project Site Plan Special Permit No. 2009-06, dated November 17, 2009; (2) a Special Permit under Section 3.2.2 of the Needham By-Law for a farmers market in the Center Business District; (3) a Special Permit under Section 3.2.2 of the By-Law for more than one use on a lot; and (4) a Special Permit under Section 5.1.1.6 of the By-Law to waive strict adherence with the off-street parking requirements of Sections 5.1.2 and 5.1.3 of the By-Law (Off-Street Parking Requirements).

The requested Major Project Site Plan Review Special Permit Amendment would permit the operation of a farmers market on Garrity's Way on Sunday afternoons. The farmers market would operate on Sundays beginning at the end of May through the last day of November, inclusive, from 12:00 p.m. to 4:00 p.m. The farmers market would have a maximum of 13 vendors, who will use booths, canopies or other temporary structures on site. In addition to the vendors, there will be tables, booths or canopies for nonprofit organizations, two artists, artisans, musicians, and NFM's Market Manager. The property is the subject of Major Project Site Plan Special Permit No. 2009-06, issued to Town of Needham, 1471 Highland Avenue, Needham, Massachusetts, dated November 17, 2009 and amended March 2, 2010, November 16, 2010, November 16, 2010, June 21, 2011 and May 1, 2012.

After causing notice of the time and place of the public hearing and of the subject matter thereof 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 Chairman, Elizabeth J. Grimes, on Wednesday, April 12, 2017 at 7:15 PM in the Powers Hall of the Needham Town Hall, 1471 Highland Avenue, Needham, Massachusetts. Board members, Elizabeth J. Grimes, Paul S. Alpert, Martin Jacobs, Jeanne S. McKnight, and Ted Owens were present at the April 12, 2017 public hearing. 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.

Submitted for the Board's deliberation prior to the close of the public hearing were the following exhibits:

- Exhibit 1 Application Form for Further Site Plan Review completed by the applicant dated March 16, 2017.
- Exhibit 2 Two letters from Jeffrey Friedman, President, Needham Farmers Market, Inc., to the Needham Planning Board dated March 8, 2017 and March 9, 2017.
- Exhibit 3 Plan prepared by Needham Department of Public Works, Engineering Division, entitled "Proposed Farmer's Market", dated March 7, 2017.
- Exhibit 4 Plan showing depiction of location of vendors on Garrity's Way, undated.
- Exhibit 5 Plan prepared by John A. Hammer III P.L.S. Professional Land Surveyor, 39 George Brown Street, Billerica, MA, 01281, entitled "1471 Highland Avenue, Zoning As-Built Plan of Land, in Needham Massachusetts", dated September 30, 2011.
- Exhibit 6 License Agreement between the Needham Farmers Market, Inc. and the Town of Needham, dated April 12, 2017.
- Exhibit 7

 Letter from Jeffrey Friedman, President, Needham Farmers Market, Inc., dated April 7, 2017 transmitting the following correspondence that was originally directed to the Selectmen: (1) Letter from the Environmental Ministry Team of the Congregational Church of Needham, undated; (2) Letter from Eleanor Rosellini and Katrina Kipp, Co-Chairs, Green Congregation Committee, First Parish in Needham, dated January 14, 2017; (3) Letter from Kevin Ruddy, Christ Episcopal Church, Green Committee, dated January 11, 2017; (4) Letter from Steve and Karen Waller, the Center Café, dated January 25, 2017; (5) Letter from Brenda Stark, Owner, Closet Exchange, dated January 16, 2017; (6) Letter from Sandra Robinson, Needham Community Council, dated January 13, 2017; (7) Email from Donna DeMaria, Teacher, Hillside School, dated February 12, 2017; (8) Statement from Needham Business Association, undated; (9) Letter from Sandra Rizkallah and Tom Pugh, Plugged In Band Program, dated January 19, 2017; and (10) Letter from Joseph Leghorn, undated.
- **Exhibit 8** Email from Tom Gehman, Market Manager, dated April 11, 2017.
- Exhibit 9 Interdepartmental Communication (IDC) to the Board from Chief Dennis Condon, Needham Fire Department, dated April 7, 2017; IDC to the Board from Lieutenant Kraemer, Police Department, dated April 5, 2017; IDC to the Board from Chief John Schlittler, Needham Police Department, dated April 7, 2017 and April 12, 2017.

Received after the close of the public hearing:

Exhibit 10 Interdepartmental Communication (IDC) to the Board from Thomas Ryder, Assistant Town Engineer, dated April 13, 2017.

EXHIBITS 1, 2, 3, 4, 5 and 6 are referred to hereinafter as the Plan.

FINDINGS AND CONCLUSIONS

- 1.1 The subject property is located in the Center Business zoning district at 1471 Highland Avenue, Needham, MA, 02492, owned by Town of Needham. Said property is shown on Needham Town Assessors Plan No. 51 as Parcel 1 containing 1.23 acres.
- 1.2 The property is the subject of Major Project Site Plan Special Permit No. 2009-06, issued to Town of Needham, 1471 Highland Avenue, Needham, Massachusetts, dated November 17, 2009 and amended March 2, 2010, November 16, 2010, November 16, 2010, June 21, 2011 and May 1, 2012.
- 1.3 On November 17, 2009, under Major Project Site Plan Special Permit No. 2009-06, dated November 17, 2009, issued to the Town of Needham, the Board approved the expansion of the existing Town Hall by approximately 13,836 square feet, and the renovation of approximately 20,989 square feet of the existing facility for a total of 34,825 square feet.
- 1.4 The Needham Farmers Market, Inc. (NFM) is a nonprofit corporation and civic organization based in Needham with the purpose of operating a farmers market in Needham and advancing community goals of healthy food and diet, especially for children, as well as providing a meeting place for Needham residents.
- The Town of Needham has agreed to allow the Needham Farmers Market to use Garrity's Way for the operation of a farmers market on Sunday afternoons from Sunday, May 28, 2017 through the Sunday, November 19, 2017. This is pursuant to a License Agreement dated April 12, 2017 detailed under Exhibit 6 of this Decision. The application for Special Permit is for a two year period renewable every two years as described under Section 4.6 of this Decision.
- 1.6 The Needham Farmers Market proposes to operate a farmers market on Garrity's Way, in front of Needham Town Hall, for four hours every Sunday, opening at 12:00 noon and closing at 4:00 p.m. Operation will begin on Memorial Day Sunday and will extend through the last day of November.
- 1.7 The Needham Farmers Market has proposed to have a maximum of 13 vendors on each market day, who will use booths, tables, canopies or other temporary structures on the site. Each vendor will have approximately one person selling at its location. The Needham Farmers Market has stated that at least eighty percent of all vendors will sell food items. The Needham Farmers Market will have a staff of approximately two people on each market day. In addition to the vendors, the Market will have tables, booths or canopies (which might be shared) on Garrity's Way for Needham nonprofit organizations, two artists, musicians, and NFM's Market Manager.
- 1.8 Set-up time is proposed to begin two hours before the start of the market and break down time is proposed to be for two hours after the market closes. The hours of operation shall be from 12:00 p.m. to 4:00 p.m.
- 1.9 The 13 vendors (maximum proposed to be present at any one time) will be located only on Garrity's Way. The physical layout of the Market shall be entirely located within the licensed area and not at all on the Town Common itself.

- During setup and breakdown, vendors may use parking spaces on Chapel Street to unload and load if the spaces are available. During Market hours, the vendors will be parked in the Chapel Street Municipal Parking Lot. During NFM's use of Garrity's Way, it will be blocked off with yellow tape, traffic cones, or by other means.
- 1.11 The Needham Farmers Market acknowledges that all food vendors shall obtain food permits from the Needham Board of Health unless excluded by State or Local regulations. All applicable State and Local Health regulations shall be met.
- 1.12 The Needham Farmers Market and its vendors propose to have liability insurance in effect during the farmers market as well as motor vehicle insurance.
- 1.13 The Petitioner has requested a Special Permit pursuant to Section 5.1.1.6 of the By-Law to waive strict adherence with the requirements of Section 5.1.2 (Required Parking) and Section 5.1.3 (off-street parking design requirements).
- 1.14 Under the By-Law Section 5.1.2, in the event that the Building Inspector is unable to determine if a particular use relates to any use within the table of "Required Parking" (Section 5.1.2), the Planning Board shall recommend to the Building Inspector a reasonable number of spaces to be provided based on the expected parking needs of occupants, users, guests or employees of the proposed business. Based on the Department of Public Works' recommendation, as recommended in Report 432 of the Planning Advisory Service for Off Street Parking Requirements for Farm Stands, the use requires 3 parking spots per every 1,000 square feet. The area of the property where the vendors will be stationed is calculated to be approximately 4,767 square feet. Therefore, the Board recommends a total parking requirement of 14 spaces (4,767/1,000 x 3 = 14). Accordingly, a waiver of 14 parking spaces is required as all available on-site parking spaces have been previously allocated to Town Hall use.
- 1.15 The Petitioner proposes to operate the farmers market after the main activities of the Town Hall have concluded for the week. During the operation of the Market, parking for motor vehicles will be at the Chapel Street, Eaton Square, and Chestnut Street Municipal Parking Lots. The vendors will park at the Chapel Street Lot. The Board finds that the parking lots in the vicinity, as noted above, will satisfy the parking demands for the Needham Farmers Market.
- 1.16 The Planning Board finds that no parking study is required for the farmers market use as proposed, due to its being held on Sundays, when parking in the Center of Town is least scarce and the Town Hall is closed.
- 1.17 The Needham Farmers Market proposes to have free musical entertainment from individuals or small groups at the farmers market, such as flute, fiddle or guitar players. Amplification, if any, would be limited and noise will not extend beyond the site.
- 1.18 Vendors will be permitted to use the restrooms of Center Café and Bagels Best.
- 1.19 Vendors will be required to remove all trash and waste per an agreement with Needham Farmers Market, Inc. Additionally, the Petitioner has stated that the farmers market staff will assist in picking up and removing all trash from the site.

- 1.20 Adjoining premises will be protected against seriously detrimental uses on the site by provision of surface water drainage, sound and site buffers, and preservation of views, light and air. The farmers market is proposed to utilize Garrity's Way on Sunday afternoons from Memorial Day Sunday through the last day of November. The Petitioner proposes no construction and no permanent site changes. The Needham Farmers Market proposes to have musical entertainment that will either be un-amplified or slightly amplified where the noise will not extend beyond Garrity's Way and Town Common.
- 1.21 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 has been assured. During the operation of the Needham Farmers Market, parking for motor vehicles will be at the Chapel Street, Eaton Square, and Chestnut Street Municipal Parking Lots. The vendors will park at the Chapel Street Lot. Any additional traffic due to the Market on surrounding streets will be marginally increased, thus no traffic congestion. When the Needham Farmers Market was previously located at the front lawn of First Parish at Dedham and Great Plain Avenues and later at the Eaton Square Municipal Parking Lot, there was no traffic congestion due to the operation of the Market. The Needham Farmers Market will be solely located on Garrity's Way. During Market hours, this road will be blocked to vehicular traffic at Chapel Street and Highland Avenue. Town Hall is closed on Sundays. This location is centrally located in Needham and thus very accessible and convenient to go to by vehicle, walking, jogging, or bicycling. This location is convenient for residents already shopping at Downtown stores. The Market will stimulate retail business. Market shoppers can also eat at local restaurants in the Downtown. Residents out for a walk with their family or dog, jogging, relaxing at the Town Common, bicycling, or shopping can stop at the Market. The handicapped and the elderly can access the Market from the surrounding main arteries, i.e. Chapel Street, Highland Avenue, Great Plain Avenue, and from the Town Common. Bagel's Best and the Center Cafe will allow vendors to use their bathrooms.
- 1.22 Adequate methods for disposal of refuse and waste will be provided. Vendors will be required to remove all trash and waste per an agreement with Needham Farmers Market, Inc. Needham Farmers Market staff will additionally assist in picking up and removing all trash from the site. Vendors may use the bathrooms at Bagel's Best and the Center Café. The waste water system for these restaurants is connected to the municipal sewer system.
- 1.23 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 has been assured. The Petitioner has not proposed any alteration to the structure or the scope of its operations. The relationship of structures and open spaces to the natural landscaping, existing buildings and other community assets will remain unchanged.
- 1.24 The proposed project will not have any adverse impacts on the Town's resources, including the Town's water supply and distribution system, sewer collection and treatment, fire protection and streets. The proposed use will not have an adverse impact on surrounding businesses. The existence of the Needham Farmers Market is an asset for Needham and will be a source of community in Needham.
- 1.25 Under Section 7.4 of the By-Law, a Major Project Site Plan Special Permit amendment may be granted within the Center Business District provided the Board finds that the proposed development will be in compliance with the goals and objectives of the Master Plan, and the provisions of the By-Law. On the basis of the above findings and conclusions, the Board

finds 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 and Town Master plans, to comply with all applicable By-Law requirements, to have minimized adverse impact, and to have promoted a development which is harmonious with the surrounding area.

- 1.26 Under Section 3.2.2 of the By-Law, a Special Permit may be granted to allow for more than one nonresidential use on the lot, provided the Board finds that the proposed use is in harmony with the general purposes and intent of the By-Law. On the basis of the above findings and conclusions, the Board finds the proposed development Plan, as conditioned and limited herein, to be in harmony with the general purposes and intent of the By-Law, to comply with all applicable By-Law requirements, and to not increase the detriment to the Town's and neighborhood's inherent use.
- 1.27 Under Section 3.2.2 of the By-Law, a Special Permit may be granted to allow a farmers market in the Center Business District. On the basis of the above findings and criteria, the Board finds that the proposed use, as conditioned and limited herein, to be in harmony with the purposes and intent of the By-Law, to comply with all applicable By-Law requirements and to not increase the detriment to the Town's and neighborhood's inherent use.
- Under Section 5.1.1.6 of the By-Law, a Special Permit to waive strict adherence with the requirements of Section 5.1.2 and Section 5.1.3 of the By-Law (Off-Street Parking Requirements) may be granted provided the Board finds that owing to special circumstances, the particular use, structure or lot does not warrant the application of certain design and parking spaces requirements, but that a waiver of certain design and parking spaces requirements is warranted. On the basis of the above findings and conclusions, the Board finds that there are special circumstances justifying the reduction in the number of required parking spaces and design requirements of the By-Law, as conditioned and limited herein, which will also be consistent with the intent of the By-Law and which will not increase the detriment to the Town's and neighborhood's inherent use.

THEREFORE, the Board voted 5-0 to GRANT: (1) the requested Major Project Site Plan Special Permit amendment under Section 7.4 of the By-Law and Section 4.2 of Major Project Site Plan Special Permit No. 2009-06, dated November 17, 2009; (2) the requested Special Permit under Section 3.2.2 of the Needham By-Law for a farmers market in the Center Business District; (3) the requested Special Permit under Section 3.2.2 of the By-Law for more than one use on a lot; and (4) the requested Special Permit under Section 5.1.1.6 of the By-Law to waive strict adherence with the off-street parking requirements of Sections 5.1.2 (Required Parking) and 5.1.3 of the By-Law (Off-Street Parking Requirements), subject to and with the benefit of the following Plan modifications, conditions and limitations.

PLAN MODIFICATIONS

Prior to the issuance of a building permit or the start of any construction on the site, 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 nor shall he permit any construction activity on the site 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 nine copies of the final Plans as approved for construction by the Building Inspector to the Board prior to the issuance of a Building Permit.

2.1 No Plan Modifications.

CONDITIONS

- 3.0 The following conditions of this approval shall be strictly adhered to. Failure to adhere to these conditions or to comply with all applicable laws and permit conditions shall give the Board the rights and remedies set forth in Section 3.23 hereof.
- 3.1 The conditions and limitations set forth in Major Project Site Plan Special Permit No. 2009-06, issued to Town of Needham, 1471 Highland Avenue, Needham, Massachusetts, dated November 17, 2009 and amended March 2, 2010, November 16, 2010, November 16, 2010, June 21, 2011 and May 1, 2012, as further amended by this Amendment are ratified and confirmed.
- 3.2 The Board approves the use by Needham Farmers Market of a farmers market on Garrity's Way, as shown on the Plan, as modified by this Decision, from the Sunday of Memorial Day Weekend to the last Sunday in November.
- 3.3 The hours of operation shall be limited to four hours every Sunday, opening at 12:00 noon and closing at 4:00 p.m. from Memorial Day Sunday through the last day of November.
- 3.4 The operation of the farmers market in the parking lot area of Garrity's Way, Needham, Massachusetts shall be as described in Sections 1.5, 1.6, 1.7, 1.8, 1.9, 1.10, 1.11, 1.12, 1.17, 1.18, and 1.19 of this Decision and as further described under the support materials provided under Exhibits 2, 3, 4 and 6 of this Decision.
- 3.5 The maximum number of vendors at any given time shall not exceed thirteen (13).
- 3.6 In addition to the vendors, up to two tables, booths or canopies may be available for the Community Farm, other Needham nonprofit organizations, artists, artisans, musicians and the Needham Farmers Market Manager.
- 3.7 The thirteen (13) vendors shall be located on Garrity's Way only. There shall be no vendors located in the Town Common.
- 3.8 At least eighty (80) percent of all vendors shall sell fresh produce and other food products from booths, tables, or other temporary structures.
- 3.9 In addition to vendors, the Needham Farmers Market may provide up to two tables, booths or canopies for use by nonprofit corporations or organizations and local artists or artisans. Selling by such groups may occur at no more than two tables and shall be restricted to Garrity's Way.
- 3.10 All food vendors shall obtain food permits from the Needham Board of Health unless excluded by State or Local regulations. All applicable State and Local Health regulations shall be met. Any ice used at the site shall be disposed of at a location approved by the Board of Health and in compliance with Board of Health and Town regulations. Disposal of ice within the Town's drainage system shall not be permitted.

- 3.11 Sale of alcoholic beverages by Needham Farmers Market vendors shall be prohibited. The drinking of alcoholic beverages on Garrity's Way where the farmers market is located shall be prohibited.
- 3.12 Set-up time shall begin no earlier than 10:00 a.m., two hours before the start of the market and break down time shall last no longer than two hours after the market closes at 4:00 p.m. During setup and breakdown, vendors may use parking spaces on Chapel Street to unload and load if the spaces are available. The spaces shall not be reserved for this purpose, but rather utilized if vacant.
- 3.13 The special permit and parking waivers granted herein are specifically premised upon the special characteristics of the farmers market in Garrity's Way and the recognition that Town Hall is closed on Sunday and not utilizing the subject parking spaces. In the event of any change in the use permitted hereunder which would result in a greater parking demand, further site plan review will be required, and the Planning Board shall be entitled to evaluate the parking demand of the building as a whole.
- 3.14 Due diligence must be exercised at all times to avoid excessive off-site parking traffic, tie-ups and unnecessary noise and congestion.
- 3.15 Needham Farmers Market vendors shall be directed to park in the Chapel Street Municipal parking Lot and patrons shall be directed to park in the Chapel Street, Eaton Square, and Chestnut Street Municipal Parking Lots. The musicians may be located on Garrity's Way in the area designed for use by the farmers market.
- 3.16 Free musical entertainment from individuals or small groups at the farmers market, such as flute, fiddle or guitar players, may be utilized. Any required permits from the Board of Selectmen shall be obtained. Amplification, if any, shall be limited and no noise shall extend beyond Garrity's Way. In the event of any complaint or issue regarding the noise, volume or amplification, the Planning Board shall retain jurisdiction to reevaluate the authorization for musical entertainment provided by this Decision.
- 3.17 Vendors shall be permitted to use the restrooms of Center Café and Bagel's Best restaurants. If vendors at any time are no longer allowed or able to use these restrooms, the Petitioner shall find other suitable arrangements and notify the Planning Board.
- 3.18 All trash and waste shall be confined to the site and shall be removed from the site promptly during the breakdown timeframe. No trash or waste shall be left on the site at the end of the breakdown at 6:00 p.m. The Petitioner shall also examine the vicinity adjacent to the market area and shall be responsible for the cleanup of any market trash or waste inadvertently left by patrons in that location. During the operation of the farmers market, trash receptacles shall be provided for the use of patrons.
- 3.19 This Special Permit to operate a farmers market at Garrity's Way is issued to Needham Farmers Market, Inc., 28 Perrault Road, Apt. #1, Needham, MA 02494 and may not be transferred, set over, or assigned by Needham Farmers Market, Inc. to any other person or entity without the prior written approval of the Board following such notice and hearing, if any as the Board, in its sole and exclusive discretion, shall deem due and sufficient.

- 3.20 The Needham Farmers Market may at its discretion exercise its rights under Major Project Site Plan Review Special Permit No. 2012-04, dated April 16, 2014 for the 2018 season in the event that the renovation of the Town Common makes the Garrity's Way location unsuitable. Nothing within this permit shall preclude the use of the alternative Needham Bank site if so selected by the Petitioner in the alternative.
- 3.21 In addition to the provisions of this approval, the Petitioner must comply with all requirements of all state, federal, and local boards, commission or other agencies, including, but not limited to the Building Inspector, Fire Department, Department of Public Works, Conservation Commission, Police Department, and Board of Health.
- 3.22 The Petitioner, by accepting this Approval, warrants that the Petitioner has included all relevant documentation, reports, and information available to the Petitioner in the application submitted, and that this information is true and valid to the best of the Petitioner's knowledge.
- 3.23 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 owner of such violation and give the owner 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 improvements, which are the subject of this petition. All construction to be conducted on site shall be conducted in accordance with the terms of this permit and shall be limited to the improvements on the Plan.
- 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.
- This special permit is subject to renewal by the Planning Board on an every 2-year basis upon letter request to the Board with adequate proof of continued permission from the Town of Needham for the continued use of Garrity's Way and Petitioner's request for specific dates and times of operation at the site.
- 4.7 This Decision shall be recorded in the Norfolk District Registry of Deeds. This Decision shall not take effect until (1) a copy of this Decision bearing the certification of the Town Clerk that twenty (20) days have elapsed after this 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 and (2) this Decision is recorded with Norfolk District Registry of Deeds, and (3) the Petitioner has delivered a certified copy of the recorded document to the Board.

The provisions of this Special Permit 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, as modified by this Decision, 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 25th day of April, 2017.

NEEDHAM PLANNING BOARD

Elizabeth J. Grimes, Chairman

Paul S, Alpert, Vice Chairman

Jeanne/S. McKnight

Martin Jacobs

1se com

Ted Owens

COMMONWEALTH OF MASSACHUSETTS

April 25 2017

On this 25 day of April, 2017, before me, the undersigned notary public, personally appeared Elizabeth 6 ines, one of the members of the Planning Board of the Town of Needham, Massachusetts, proved to me through satisfactory evidence of identification, which was person ally known to me to be the person whose name is signed on the proceeding or attached document, and acknowledged the foregoing to be the free act and deed of said Board before me.

Notary Public

My Commission Expires: March 18, 20)

TO WHOM IT MAY CONCERN: This is to certify that the 20-day appeal period on the Decision on Needham Farmers Market, Inc., 28 Perrault Road, Apt. #1, Needham, MA 02494 and Town of Needham, 1471 Highland Avenue, Needham, MA, has passed, and there have been no appeals made to this office. (All Judicial Appeals taken from this Decision have been dismissed.)

Date

Theodora K. Eaton, Town Clerk

Copy sent to:

Petitioner - Certified Mail #

Town Clerk Building Inspector

Director, PWD Board of Health

Conservation Commission

Board of Selectmen

Engineering

Fire Department Police Department

Jeff Friedman

Parties in Interest



TOWN OF NEEDHAM, MA

PLANNING AND COMMUNITY
DEVELOPMENT DEPARTMENT

-3 PH 12: 500 Dedham Ave Needham, MA 02492 781-455-7550

PLANNING

MAJOR PROJECT SITE PLAN REVIEW SPECIAL PERMIT AMENDMENT TO DECISION Application No. 2009-06

Needham Farmers Market, Inc. Town of Needham May 1, 2018

(Original Decision dated November 17, 2009, amended March 2, 2010, November 16, 2010, November 16, 2010, June 21, 2011, May 1, 2012 and April 25, 2017)

DECISION of the Planning Board (hereinafter referred to as the Board) on the petition of Needham Farmer's Market, Inc., 28 Perrault Road, Apt. #1, Needham, MA 02494 and Town of Needham, 1471 Highland Avenue, Needham, MA, (hereinafter referred to as the Petitioner) for property located at 1471 Highland Avenue, Needham, Massachusetts. Said property is shown on Assessors Plan No. 51 as Parcel 1 containing 59,221, square feet in the Center Business District.

This Decision is in response to an application submitted to the Board on April 2, 2018, by the Petitioner. The requested Major Project Site Plan Review Special Permit Amendment would, if granted, permit a change to paragraph 3.8 of the Special Permit to allow the truck of a new meat vendor, Chestnut Farms, to park on Garrity's Way during the Farmers Markets business hours. In addition to using a canopy and table to sell at the Market, Chestnut Farms proposes to use its truck for refrigeration and storage of frozen meat. The meat product will be kept in freezers in the truck until removed for customers.

Chestnut Farms proposes to occupy one of the two parking cutouts on Garrity's Way, in front of the Needham Town Hall. The parking cutout closest to Highland Avenue is the preferred location. The vendor layout for the location of Chestnut Farms truck on Garrity's Way is detailed on the plan described under Exhibit 3 below.

Chestnut Farms further proposes to use the truck's batteries with a converter to power its freezers for meat. In the alternative Chestnut Farms has further proposed to use the Town's electrical outlets behind the parking cut-out on Garity's Way to power its freezers for meat if so approved by the Town Manager. Whichever power source Chestnut Farms uses its truck's engine will be turned off during market hours and said truck will not be moved during market hours.

The changes requested are deemed minor in nature and extent and do not require a public notice or a public hearing. Testimony and documentary evidence were presented to the Board on April 24, 2018 at Needham Town Hall (Highland Room), 1471 Highland Avenue, Needham, MA at 7:30 p.m. Board

members Jeanne S. McKnight, Elizabeth J. Grimes, Paul S. Alpert and Ted Owens were present throughout the proceedings. Testimony and documentary evidence were presented and the Board took action on the matter.

EVIDENCE

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

- Exhibit 1 Application for Amendment to Major Project Site Plan Special Permit 2009-06, dated April 2, 2018.
- Exhibit 2 Letter from Jeffrey Friedman, President, Needham Farmers Market, Inc., to the Needham Planning Board dated April 9, 2018.
- Exhibit 3 Plan showing depiction of location of vendors on Garrity Way, undated.
- Exhibit 4 Interdepartmental Communications (IDC) to the Board from Thomas Ryder, Assistant Town Engineer, dated April 19, 2018; IDC to the Board from Dennis Condon, Chief of Department, Needham Fire Department, dated April 17, 2018; and IDC to the Board from Tara E. Gurge, Assistant Public Health Director, dated April 9, 2018.

FINDINGS AND CONCLUSIONS

The findings and conclusions made in Major Project Site Plan Special Permit No. 2009-06, dated November 17, 2009, amended March 2, 2010, November 16, 2010, November 16, 2010, June 21, 2011, May 1, 2012 and April 25, 2017 were ratified and confirmed except as follows:

- 1. The Board hereby approves the modifications as described under Exhibits 1, 2, and 3.
- 2. Paragraph 3.8 on page 7 of the Decision is modified to read as follows: "At least eighty (80) percent of all vendors shall sell fresh produce and other food products from booths, tables, trucks or other temporary structures. If a truck is utilized it shall be parked in one of the two parking cutouts on Garrity's Way, in front of the Needham Town Hall with the parking cutout closest to Highland Avenue being the preferred location. Truck engines shall be turned off during the market's business hours and no truck shall be moved during the market's business hours."
- 3. The proposed changes are deemed minor in nature and do not require public notice of a hearing.

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.

No plan modifications are required.

DECISION

NOW THEREFORE, the Board voted 4-0 that:

- 1. The proposed changes are deemed minor in nature and do not require a public notice or public hearing. No 20-day appeal period from this Amendment of Decision is required.
- 2. The requested modifications are granted.

Witness our hands this day of	May , 2018.
NEEDHAM PLANNING BOARD	
TEO OMS	
Ted Owens, Chairperson	
Last Shar	<u>- </u>
Paul S. Alpert	
2	
Elizabeth J. Grimes	
Jun > Mal	
Jeanné S. McKnight	
Norfolk, ss	ONWEALTH OF MASSACHUSETTS
The second secon	
On this day of appeared day of	, 2018, before me, the undersigned notary public, personally _, one of the members of the Planning Board of the Town of
Needham, Massachusetts, proved to	me through satisfactory evidence of identification, which was
personally known	, to be the person whose name is signed on the preceding or
me.	I the foregoing to be the free act and deed of said Board before
	Notary Public: Allandia Cll
	My Commission Expires: March 18, 2022
Copy sent to:	
Petitioner – Certified Mail # Town Clerk	
Building Inspector	
Director, PWD Board of Health	
Conservation Commission	
Design Review Board	
Board of Selectmen Engineering	
Fire Department	
Police Department	
Jeffrey M. Friedman Parties In Interest	

From: John Schlittler
To: Alexandra Clee

Subject: RE: Request for comments on Planning Board application - FW: Needham Farmers Market - Special Permit

Application

Date: Tuesday, April 28, 2020 11:45:15 AM

The police department has no issues

From: Alexandra Clee <aclee@needhamma.gov>

Sent: Monday, April 27, 2020 4:51 PM

To: John Schlittler < JSchlittler@needhamma.gov>; Anthony DelGaizo

<a>ADelgaizo@needhamma.gov>; Thomas Ryder <tryder@needhamma.gov>; Tara Gurge

<TGurge@needhamma.gov>; Edward Olsen <eolsen@needhamma.gov>

Cc: Lee Newman < LNewman@needhamma.gov>

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- Use of small portion of Town Common
- Earlier set up time
- Temporary parking of two vehicles on Highland Avenue next to Garrity Way during set up and breakdown.

Details of the proposal are in the attached materials.

Please note that the Town Manager has signed the application as well as the Farmer's Market representative. However, there is no executed license agreement yet (we understand it is forthcoming).

The Planning Board will be reviewing this application at its meeting of May 5. If you can review the materials and provide your comments, that would be very helpful. If possible, please get your comments to us by end of business day Thursday April 30 in order for your comments to be in the Board's packet. However, we understand everyone is busy and working under unusual circumstances; so if Thursday is not possible, please get us your comments by May 5.

Thanks, alex.

Alexandra Clee Assistant Town Planner Town of Needham From: friedmanesq@aol.com>

Sent: Thursday, April 23, 2020 3:29 PM

To: Theodora Eaton < TEaton@needhamma.gov>

Cc: Lee Newman <<u>LNewman@needhamma.gov</u>>; Alexandra Clee <<u>aclee@needhamma.gov</u>>; Kate

Fitzpatrick < KFitzpatrick@needhamma.gov >; Sandy Cincotta < scincotta@needhamma.gov >

Subject: Needham Farmers Market - Special Permit Application

Tedi Eaton, Town Clerk 1471 Highland Ave. Needham, MA 02492

Re: Application to Amend Special Permit by Needham Farmers Market
Major Project Site Plan Review Special Permit, App. No. 2009-06 (April 25, 2017)

Dear Tedi:

I have attached for filing: Needham Farmers Market's Application to Amend its Special Permit, referenced above; scan of \$250 check to Town of Needham for Application fee; and NFM letter to the Needham Planning Board supporting the Application.

If you have any questions involving the filing, etc., please contact me.

Sincerely, Jeffrey M. Friedman President, Needham Farmers Market

28 Perrault Road, Apt. #1 Needham, MA 02494 cell: 781.241.2037 From: Thomas Ryder

To: <u>Alexandra Clee</u>; <u>Lee Newman</u>

Cc: Anthony DelGaizo

Subject: Re: Request for comments on Planning Board application - FW: Needham Farmers Market - Special Permit

Application

Date: Monday, May 4, 2020 5:43:55 PM

Hi Alex,

We have no comment or object to the proposed plan.

Tom Ryder

Engineering Division

From: Alexandra Clee <aclee@needhamma.gov>

Sent: Monday, May 4, 2020 2:53 PM

To: Anthony DelGaizo <ADelgaizo@needhamma.gov>; Thomas Ryder <tryder@needhamma.gov>; Tara Gurge <TGurge@needhamma.gov>; Edward Olsen <eolsen@needhamma.gov>; Dennis Condon <DCondon@needhamma.gov>

Cc: Lee Newman <LNewman@needhamma.gov>

Subject: FW: Request for comments on Planning Board application - FW: Needham Farmers Market - Special Permit Application

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(Dennis, I did not originally include you, I am sorry. It may not really be a concern of your department, but I should leave that determination up to you by letting you comment! Apologies.)

Thanks, alex.

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Sent: Thursday, April 23, 2020 3:29 PM

To: Theodora Eaton < TEaton@needhamma.gov>

Cc: Lee Newman < <u>LNewman@needhamma.gov</u>>; Alexandra Clee < <u>aclee@needhamma.gov</u>>; Kate Fitzpatrick < <u>KFitzpatrick@needhamma.gov</u>>; Sandy Cincotta < <u>scincotta@needhamma.gov</u>>

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28 Perrault Road, Apt. #1 Needham, MA 02494 cell: 781.241.2037 From: Dennis Condon
To: Alexandra Clee

Subject: RE: Request for comments on Planning Board application - FW: Needham Farmers Market - Special Permit

Application

Date: Monday, May 4, 2020 2:57:50 PM

Attachments: image001.png

image002.png

Hi Alex,

We are okay with the NFM.

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: Monday, May 04, 2020 2:54 PM

To: Anthony DelGaizo <ADelgaizo@needhamma.gov>; Thomas Ryder <tryder@needhamma.gov>; Tara Gurge <TGurge@needhamma.gov>; Edward Olsen <eolsen@needhamma.gov>; Dennis Condon <DCondon@needhamma.gov>

Cc: Lee Newman < LNewman@needhamma.gov>

Subject: FW: Request for comments on Planning Board application - FW: Needham Farmers Market - Special Permit Application

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<<u>ADelgaizo@needhamma.gov</u>>; Thomas Ryder <<u>tryder@needhamma.gov</u>>; Tara Gurge

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To: Theodora Eaton < <u>TEaton@needhamma.gov</u>>

Cc: Lee Newman < LNewman@needhamma.gov >; Alexandra Clee < aclee@needhamma.gov >; Kate

Fitzpatrick < KFitzpatrick@needhamma.gov >; Sandy Cincotta < scincotta@needhamma.gov >

Subject: Needham Farmers Market - Special Permit Application

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Sincerely, Jeffrey M. Friedman President, Needham Farmers Market

28 Perrault Road, Apt. #1 Needham, MA 02494 cell: 781.241.2037 From: <u>Tara Gurge</u>
To: <u>Alexandra Clee</u>

Cc: <u>Timothy McDonald</u>; <u>Diana Acosta</u>

Subject: RE: Request for comments on Planning Board application - FW: Needham Farmers Market - Special Permit

Application

Date: Monday, May 4, 2020 4:18:49 PM

Attachments: MDAR Bulletin 5 Farmers" Market CSA Farm Stand Guidance-with-notes -4.pdf

image002.png image003.png

Importance: High

Alex -

Thanks for sending the reminder. We reviewed this proposal with Tom Gehman, Needham FM coordinator, before he sent it to you. We should be all set if all the MDAR Farmers Market COVID-19 protocols can be met, along with meeting any other additional requirements that may come up as we receive more guidance from our state and local Board of Health as this pandemic plays out. (See document attached that Tom submitted, which includes his written in responses.)

After reviewing the Special Permit application, here are our additional comments, see below –

- We DO NOT support the increase in 2 new food vendors OR increase in 2 additional artists that are being proposed at this years market. And do not support the extra hour in set up time as well, since additional vendors may not be allowed.
- We discussed with Tom that we may not even allow the music group or 2 artist vendors (i.e. clothing vendors, etc.) to take part in this year's market due to the fact that they may cause people to linger and spend a longer time on site at the market. No large groups are allowed to congregate for any length of time due to this pandemic we are in. (As you recall only food vendors are considered 'essential' services.) Tom was in agreement that if the BOH felt it necessary to do so, we may restrict these entertainment or artist vendors from taking part in this year's market, due to this pandemic situation.
- Our Board of Health is also pushing the curbside pick-up option to be conducted by this year's food vendors to strongly encourage them to have a call in/pay in advance order system set up. They also stress the need to have staggered appointments set up to allow people to stop by the market and just grab their pre-paid labeled bags of product, and go. It was strongly recommended to have these pre-order pick-up tables be located on the edge of market area, if possible. Tom is currently working very hard to encourage vendors to set up that call and pay in advance option.

Let me know if you need any additional info. or have further questions on those comments.

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 - <u>tgurge@needhamma.gov</u> Web- <u>www.needhamma.gov/health</u>



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STATEMENT OF CONFIDENTIALITY

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Follow Needham Public Health on Twitter!

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Special Permit Application

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THE COMMONWEALTH OF MASSACHUSETTS

EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS



Department of Agricultural Resources

251 Causeway Street, Suite 500, Boston, MA 02114 617-626-1700 fax: 617-626-1850 www.mass.gov/agr



CHARLES D. BAKER Governor KARYN E. POLITO Lt. Governor KATHLEEN A. THEOHARIDES Secretary

JOHN LEBEAUX Commissioner

Bulletin: 2020-05

FARMERS' MARKETS, FARM STANDS, & CSAs Guidance Memo #5

Considerations for Fruit and Vegetable Growers Related to Coronavirus & COVID-19

The current COVID-19 pandemic is a common concern and many are wondering what they can and should do. The information here is intended to help guide the fruit and vegetable farming community. If you have concerns or suggestions please contact the MDAR Produce Safety Team at Michael.Botelho@mass.gov or via phone at (508) 985-8751, or UMASS Agricultural Extension Vegetable Program at lmckeag@umass.edu or via phone at (413) 545-1051.

Background

COVID-19 is the disease caused by the SARS-CoV-2 virus ("the novel coronavirus"). Symptoms include fever, cough, and shortness of breath and may appear 2-14 days after exposure. While the majority of COVID-19 illnesses are mild, it can result in severe and fatal illness, particularly in the elderly and among those with severe underlying health conditions. Federal and State agencies are working hard to better understand the virus, how to control its spread, and how to treat those infected. One of the key things we can all do is to limit and slow the spread of COVID-19 to provide time for this understanding to develop and to not overwhelm the medical system. Much more information is available at the CDC Situational Summary page.

Foodborne Exposure to COVID-19 (As of 3/24/20)

Unlike foodborne gastrointestinal (GI) viruses like norovirus and hepatitis A that often make people ill through contaminated food, SARS-CoV-2, which causes COVID-19, is a virus that causes respiratory illness. Foodborne exposure to this virus is not known to be a route of transmission.

The virus is thought to spread mainly from person-to-person. This includes between people who are in close contact with one another (within about 6 feet), and through respiratory droplets produced when an infected person coughs or sneezes. These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs. It may be possible that a person can get COVID-19 by touching a surface or object that has the virus on it and then touching their mouth, nose, or possibly their eyes, but this is not thought to be the main way the virus spreads. Please visit https://www.fda.gov/food/food-safety-during-emergencies/food-safety-and-coronavirus-disease-2019-covid-19 for further information on COVID-19 and food.

Farmers' Markets/Farm Stands/CSAs in Massachusetts

Farmers' markets and farm stands (including Community Supported Agriculture farm stands (CSAs)) are primary sales outlets for many Massachusetts farms. Maintaining and increasing access to local food is essential, particularly in times of unsteadiness. Local farming may fill a critical void in food distribution patterns if the response to COVID-19 increases

and growing regions located in the Western U.S. experience production and distribution challenges. The Massachusetts Department of Agricultural Resources, along with its State and Federal partners, are focused on enabling farm stands and farmer markets to sell safe, healthy and local products during the COVID-19 response. Our aim continues to be the support of the many farms that will be entering the production season so they are able to provide fresh farm products to the residents, retail markets and restaurants in the Commonwealth.

What are some best practices for farmers' markets/farm stands and other local produce/farm product disbursement sites to limit the spread of COVID-19?

- 1. **Social Distancing:** Market managers should increase the space between vendors to assist in patron flow and reduce crowding at vendor stations. Setting up vendor tables in a straight run or "L" formation should assist visitors in maintaining a safe distance as they visit the market. Market managers may also consider limiting the number of customers who can enter the market space at one time based on visitation rates. Markets are strongly encouraged to remind customers of "social distancing", maintaining a space of at least six feet from one another while shopping at farmers markets, through signage at prominent locations and vendor tables and through verbal reinforcement. As a reminder, Market staff, vendors and customers should:
 - 1) Avoid close contact with people who are sick.
 - 2) Avoid touching your eyes, nose, and mouth.
 - 3) Stay home from the market when you are sick.
 - 4) Cover your cough or sneeze with a tissue, then throw the tissue in the trash, 4 a. Face mask must be worn by customers and vendors
 - 5) Clean and disinfect frequently touched objects and surfaces.
- 2. **Product Samples:** Farmers' markets should eliminate the offer of samples of products to reduce opportunities for contamination during COVID-19 response in the Commonwealth. No sampling allowed
- 3. **Minimize the Number of Touches:** Market managers and vendors should minimize the handling of produce and products by both staff and customers disallowing the touching of produce at vendor tables and sales points. Vendors are encouraged to facilitate reduced handling by utilizing small produce/product displays and lists on signage or chalkboards to communicate product lists and availability while keeping produce for sale in larger bins that are covered and out of reach of customers. Online ordering via email or pre-bagged orders are options that can be considered by markets/vendors as well as drive-up systems.
 - Vendors will pick and bag orders, not customers. Online ordering will be encouraged, then prebagged pickup.
- 4. **The use of reusable bags:** Farmers' market managers, market staff, as well as vendors and their employees, <u>shall not perform bagging of produce if reusable bags are utilized until further notice</u>. Vendors may choose to use recyclable paper bags, compostable plastic bags or single-use plastic bags during COVID-19 response operations in the Commonwealth, No reusable bags will be allowed in the market.
- 5. **Should farms/vendors be disinfecting produce?** As noted above, there is no indication that COVID-19 is transmitted via produce. The virus is thought to be spread mainly from person to person according to the CDC. For most farms the level of operational change and amount of disinfectant needed to disinfect produce is unrealistic. If you are using a disinfectant on produce, please follow the instructions located on the label of the product to find directions on the proper use of the product. Cleanliness will be encouraged, no disinfecting of produce.

6. Market/Vendor Display cleaning/sanitizing: Vendors are encouraged to limit the use of tablecloths in order to make it easier to clean and sanitize table surfaces, or utilize a sheet of clear plastic over the top of the tablecloth to facilitate increased cleaning and sanitizing of contact surfaces. Vendors should clean and sanitize their displays, including their tables and items used to display produce in, at the end of every market and at intervals during market operation. Markets are recommended to discontinue the use of display items that cannot be cleaned and sanitized. The virus that causes coronavirus disease (COVID-19) can be stable for several hours to days on surfaces, up to 24 hours on cardboard and up to two to three days on plastic and stainless steel, https://www.nih.gov/news-events/news-releases/new-coronavirus-stable-hours-surfaces.

No cloth tablecloths will be allowed. Bare, clean tabletops or plastic sheet table coverings will be used.

- 7. Can Markets/vendors use bleach as a sanitizing agent on contact surfaces? Yes, you can also follow the CDC guidance and use a mixture of bleach and water (5 tbsp per gallon or 4 tsp per quart).

 We will allow bleach solution per the CDC guidance to be used.
- 8. What should Markets/CSAs and vendors use for disinfection and sanitizing? The EPA has provided a list of disinfectants for use against SARS-CoV-2, the virus causing COVID-19. Very few of these products are common on the farm and may be hard to find. If you are currently using a sanitizer as part of a standard cleaning and sanitizing procedure for hard surfaces on your farm, you can use the produce at Market or on bins and containers used for CSA deliveries. Consider reviewing the label for that product and using it for disinfection of specific high-touch surfaces if applicable, We support this recommendation.
- 9. **Hand washing/hygiene:** Markets are encouraged to make available supplies for event staff and participants to promote personal hygiene practice during COVID-19 response, including but not limited to portable sinks equipped with soap and paper towels, hand sanitizers and paper towels. Hand washing stations can be brought in by the market for customer and vendor use. Hand sanitizer stations can be useful, though should not be used as a replacement for handwashing. (Masks are not recommended for healthy adults unless they are caring for someone with COVID-19.) We support this recommendation. We will provide the handwashing station as in prior years.
- 10. **Gloves:** Market managers, staff and vendors <u>must utilize disposable gloves at all times</u> during market/CSA operations. Gloves can provide a barrier between hands and produce, preventing transmission of pathogens. They can also be a good reminder not to touch your face. Remember however, that gloves can be a source of contamination if not used properly. Follow <u>CDC glove removal guidelines</u>. Please remember to <u>follow hand washing guidelines</u> recommended by the CDC before putting on gloves and between glove change-outs.

 We will require the gloves as stated.
 - 11. **Money Handling:** Markets and vendors should minimize cash transactions. If more than one person is working the table, vendors should designate one person to handle money and another to handle produce/product. Vendors can round their prices to the nearest dollar so they can reduce the acceptance of coins, and minimize the handling of change. Wipe down credit card readers and POS equipment periodically and between transactions. Online payment application platforms used on smartphones, such as Venmo or PayPal, are a viable option to facilitate transactions at markets and farm stands,
 - We will require vendors to use wipes to sanitize cards and readers. We are studying a centralized cashier
 - 12. **Establish Relationships:** Communicate with key community partners such as local health departments and the site host of your market and collaborate with them on broader planning efforts during COVID-19 response.

We support and seek the partnership of our town government and community partners to operate a safe and orderly market.

13. **Plan for Cancellations:** Identify actions to take if you need to cancel the market, such as communications with customers and vendors. Share planned closure communication strategy and channels with vendors in advance. If you do need to close, consider alternative ordering and distribution methods. Consider suspending penalties for last minute vendor cancellations,

We have an emergency cancellation process in our rules for individual market days as well as a weekly newsletter and social media to announce vendors selling at the upcoming market.

14. **Customer/Consumer Education and Outreach:** Keep market staff, vendors and customers updated on market information and guidelines and ensure folks who are sick stay home. Emphasize that protecting public health is paramount to your market and describe any changes to market procedures to prevent the spread of infection. Use health messages and materials developed by credible public health sources such as your local public health department, the Massachusetts Department of Agricultural Resources, the Massachusetts Department of Public Health

so your customers know what steps you are taking to keep them and your market venue/farm stand/CSA safe. We are developing a plan to reconfigure the market space for safe operation, and will educate our staff, vendors, and customers about safe operations through our rules covid-19 addendum and publicity work.

what we know now and will be updated as we learn more. Please visit

gov/resource/information-on-the-outbreak-of-coronavirus-disease-2019-

From: <u>Tara Gurge</u>
To: <u>Alexandra Clee</u>

Cc: Lee Newman; tgehman@comcast.net; Timothy McDonald; Jeff Friedman; Diana Acosta

Subject: RE: Needham Farmers Market - Application to Amend Special Permit

Date: Tuesday, May 12, 2020 3:50:34 PM

Alex –

We have reviewed the attached documents and are in agreement with these revisions, which were reviewed with our Board of Health at our virtual meeting this morning.

Thanks,

Tara

From: Alexandra Clee <aclee@needhamma.gov>

Sent: Tuesday, May 12, 2020 3:13 PM

To: Jeff Friedman <friedmanesq@aol.com>; Tara Gurge <TGurge@needhamma.gov>; Diana Acosta

<dacosta@needhamma.gov>

Cc: Lee Newman <LNewman@needhamma.gov>; tgehman@comcast.net

Subject: Fw: Needham Farmers Market - Application to Amend Special Permit

Received, thanks.

Tara/Diana,

could you review the attached and provide additional comment for the Planning Board?

Thanks, alex.

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

From: friedmanesg@aol.com <friedmanesg@aol.com>

Sent: Tuesday, May 12, 2020 3:02 PM

To: Alexandra Clee <aclee@needhamma.gov>; Lee Newman <<u>LNewman@needhamma.gov</u>>

Cc: tgehman@comcast.net <tgehman@comcast.net>; Tara Gurge <TGurge@needhamma.gov>;

Diana Acosta < dacosta@needhamma.gov>

Subject: Needham Farmers Market - Application to Amend Special Permit

Hi Alex and Lee,

I have attached NFM's signed letter to the Planning Board, from Tom Gehman and myself, regarding changes to its Application to Amend Special Permit. Also attached is NFM Diagram & Health and Safety Procedures for 2020, referenced in my letter to the Planning Board. This is pursuant to changes agreed upon with Tara Gurge and Diana Acosta from the Public Health Department. They are copied. If you have any questions, etc., please contact me.

Would you please schedule Needham Farmers Market's Application to Amend Special Permit for the Planning Board's May 19th meeting?

Thanks, Jeff

Jeff Friedman
President, Needham Farmers Market

MAJOR PROJECT SITE PLAN REVIEW SPECIAL PERMIT AMENDMENT TO DECISION Application No. 2009-06

Needham Farmers Market, Inc. Town of Needham May 20, 2020

(Original Decision dated November 17, 2009, amended March 2, 2010, November 16, 2010, November 16, 2010, June 21, 2011, May 1, 2012 and April 25, 2017 and May 1, 2018)

(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 Needham Farmers Market, Inc., 28 Perrault Road, Apt. #1, Needham, MA 02494 and Town of Needham, 1471 Highland Avenue, Needham, MA, (hereinafter referred to as the Petitioner) for property located at 1471 Highland Avenue, Needham, Massachusetts. Said property is shown on Assessors Plan No. 51 as Parcel 1 containing 59,221, square feet in the Center Business District.

This Decision is in response to an application submitted to the Board on April 23, 2020, by the Petitioner. The requested Major Project Site Plan Review Special Permit Amendment would, if granted, permit a change to the Special Permit to allow: (1) the use of a small portion of Town Common beside the central walkway leading to Garrity's Way, as shown on the diagram submitted with the application under Exhibit 4; (2) the set up time to start at 9:00 a.m. instead of 10:00 a.m.; (3) temporary parking of two vehicles on Highland Avenue next to Garrity's Way during set up and breakdown; and (4) renewal of Special Permit No. 2009-06 by the Board from June 14, 2020 through November 22, 2020 as amended herein.

The changes requested are deemed minor in nature and extent and do not require a public notice or a public hearing. Testimony and documentary evidence were presented to the Board on May 20, 2020 via remote meeting using Zoom ID 826-5899-3198. Board members Martin Jacobs, Jeanne S. McKnight, Paul S. Alpert, Bruce Eisenhut and Ted Owens were present throughout the proceedings. Testimony and documentary evidence were presented and the Board took action on the matter.

EVIDENCE

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

Exhibit 1 Application for Amendment to Major Project Site Plan Special Permit 2009-06, dated April 23, 2020.

- Exhibit 2 Two letters from Jeffrey Friedman, President, Needham Farmers Market, Inc., to the Needham Planning Board, dated April 23, 2020 and May 12, 2020
- Exhibit 3 Plan showing depiction of location of vendors on Garrity's Way, titled "Needham Farmers Market, 2020," undated.
- Exhibit 4 Plan showing depiction of location of vendors on Garrity's Way, titled "Needham Farmers Market, 2020, Configuration shown based on Current Requirements" May 12, 2020, with proposed actions/steps to meet Health Dept. standards.
- Exhibit 5 Order of the Commissioner of Public Health for Farmers Markets, Farm Stands and CSAs, dated April 27, 2020.
- Exhibit 6 Massachusetts Department of Agricultural Resources Bulletin: 2020-05, "Farmers Markets, Farm Stands, & CSAs Guidance Memo #5, Considerations for Fruits and Vegetable Growers Related for Coronavirus and COVID-19."
- Exhibit 7 License Agreement between the Needham Farmers Market Inc., a not for profit corporation, with its principal place of business at 28 Perrault Rd, Apt. 1, Needham, MA 02494, (Licensee), and the Town of Needham, Massachusetts, a municipal corporation with its usual place of business at 1471 Highland Ave., Needham, MA 02492 (Licensor), dated January 31, 2018.
- Exhibit 8 Interdepartmental Communications (IDC) to the Board from John Schlittler, Chief of Police, Needham Police Department, dated April 28, 2020; Thomas Ryder, Assistant Town Engineer, dated May 4, 2020, 2020; IDC to the Board from Dennis Condon, Chief of Department, Needham Fire Department, dated May 4, 2020; and IDC to the Board from Tara E. Gurge, Assistant Public Health Director, dated May 4, 2020 and May 12, 2020.

FINDINGS AND CONCLUSIONS

The findings and conclusions made in Major Project Site Plan Special Permit No. 2009-06, dated November 17, 2009, amended March 2, 2010, November 16, 2010, November 16, 2010, June 21, 2011, May 1, 2012, April 25, 2017 and May 1, 2018 were ratified and confirmed except as follows:

- 1. The Board hereby approves the proposed changes: (1) the use of a small portion of the Town Common beside the central walkway leading to Garrity's Way, as shown on the diagram submitted with the application (Exhibit 4); (2) the set up time to start at 9:00 a.m. instead of 10:00 a.m.; and (3) temporary parking of two vehicles on Highland Avenue next to Garrity's Way during set up and breakdown, all as described in more detail under Exhibits 1, 2, and 4.
- 2. The Board hereby approves the renewal of Special Permit No. 2009-06 from June 14, 2020 through November 22, 2020, contingent upon renewal of the License Agreement dated January 31, 2018 between the Town and Needham Farmers Market (Exhibit 7) permitting such use as authorized herein during the noted time period. The Petitioner acknowledges that this Decision is not active until such time as the above-named License Agreement renewal is executed with the Town and submitted to the Planning Board.
- 3. The Needham Farmers Market shall work with the Parks and Forestry Department to ensure the protection of the grass in the Town Common. Currently, the Town Common is expected to be renovated in 2021. Therefore, the Petitioner is only requesting the use of the Common for the season of 2020. Future use will require future consideration.

- 4. Farmers Markets are considered to be Essential Services, under the Governor's order during Covid19 Emergency that all non-essential businesses be closed. The Needham Farmers Market commits
 to taking all precautions as prescribed by law in effect. Specifically, the Needham Farmers Market
 and its Managers commit to following the legal recommendations of the Order of the Commissioner
 of Public Health for Farmers Markets (Exhibit 5) and the recommendations of the MDAR Bulletin
 (Exhibit 6), both as implemented by the Needham Health Department, and to further supervise all
 vendors, artists and musicians in following the recommendations of that Order and Bulletin.
- 5. Per the requirements of the Needham Health Department, musicians will be eliminated from the Farmers Market. Furthermore, artists are not allowed at farmers markets until such time as Governor Baker allows it. Needham Farmers Market will comply with all local and state requirements.
- 6. The proposed changes are deemed minor in nature and do not require public notice of a hearing.

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.

No plan modifications are required.

DECISION

NOW THEREFORE, the Board voted 5-0 that:

- 1. The proposed changes are deemed minor in nature and do not require a public notice or public hearing. No 20-day appeal period from this Amendment of Decision is required.
- 2. The requested modifications are granted.
- 3. The Board hereby approves the renewal of Special Permit No. 2009-06 from June 14, 2020 through November 22, 2020, contingent upon renewal of the License Agreement dated January 31, 2018 between the Town and Needham Farmers Market (Exhibit 7) permitting such use as authorized herein during the noted time period. The subject Decision is not active until such time as the abovenamed License Agreement renewal is executed with the Town and submitted to the Planning Board.
- 4. The Needham Farmers Market shall work with the Parks and Forestry Department to ensure the protection of the grass in the Town Common. Only use of the Common for the season of 2020 is herein authorized. Future use will require future consideration.

- 5. The Needham Farmers Market shall take all precautions as prescribed by law in effect. Specifically, the Needham Farmers Market and its Managers shall follow the legal recommendations of the Order of the Commissioner of Public Health for Farmers Markets (Exhibit 5) and the recommendations of the MDAR Bulletin (Exhibit 6), both as implemented by the Needham Health Department, and shall further supervise all vendors, artists and musicians in following the recommendations of said Order and Bulletin.
- 6. Per the requirements of the Needham Health Department, musicians shall be eliminated from the Farmers Market. Furthermore, artists shall not be allowed at Needham Farmers Market until such time as Governor Baker permits the reactivation of such use. The Needham Farmers Market shall comply with all local and state requirements.

Witness our hands this	day of	, 2020.
NEEDHAM PLANNING	BOARD	
Martin Jacobs, Chairperson	n	_
Jeanne S. McKnight		_
Ted Owens		-
Paul S. Alpert		-
Bruce T. Eisenhut		-

Copy sent to:

Petitioner – Certified Mail #
Town Clerk
Building Inspector
Director, PWD
Board of Health
Conservation Commission
Design Review Board
Select Board
Engineering
Fire Department
Police Department
Jeffrey M. Friedman
Parties In Interest



BY MAIL & EMAIL:

Inewman@needhamma.gov

May 4, 2020

Needham Planning Board Town of Needham 500 Dedham Street Needham, MA 02492

Attn: Lee Newman, Planning Director

Re: Beth Israel Deaconess Hospital - Needham, Inc.

Request for Minor Modification and Extension to Amendment to Special Permit Decision dated March 5, 2019, Application No. 2007-10 ("Amendment to Decision")

148 Chestnut Street, Needham, MA

Dear Planning Board Members and Ms. Newman:

In light of the unprecedented circumstances resulting from the COVID-19 outbreak, Beth Israel Deaconess Hospital – Needham, Inc. (the "Hospital" or "Applicant") requests for good cause a minor modification and extension of the above-referenced Amendment to Decision, as further described below. I hereby submit on behalf of the Hospital an Application for Further Site Plan Review requesting such minor modification and extension, of which this letter is a part.

The Amendment to Decision allowed the construction of a temporary covered vestibule and installation of a temporary compounding pharmacy structure and associated improvements. Section 3.3 of the Amendment to Decision provides that the Hospital is obligated to remove the temporary compounding pharmacy, vestibule and other associated improvements and restore the property to its prior condition within one year of the issuance of the building permit for the permitted improvements, unless the Planning Board at the request of the Applicant determines the delay beyond one year is for good cause. Building Permit 120190306 was issued on March 28, 2019 to install the temporary pharmacy improvements. At this time the temporary pharmacy structure has been removed and the temporary vestibule remains on site. We note that pursuant to Section 17 of the Municipal Relief legislation (Chapter 53 of the Acts of 2020) expiration dates and deadlines for meeting

Town of Needham Planning Board May 4, 2020 Page 2 of 5

permit conditions in land use permits, including the Amendment to Decision and the Building Permit, are tolled during the state of emergency to respond to COVID-19 declared by the Governor on March 10, 2020 (the "State of Emergency").

<u>Minor Modification:</u> The Hospital requests the Amendment of Decision be modified to allow the installation of a temporary unit/structure, adjacent to the existing temporary vestibule, to be used for COVID-19 related Hospital uses, as further described below.

At present, out of caution and concern for the citizens of Needham and Hospital patients and families, we were able to secure a refrigerated unit to be used as a temporary morgue during the COVID – 19 crisis. The refrigerated unit, which we hope to use not at all or only rarely, has been located adjacent to the temporary vestibule that was constructed to serve the temporary Cancer Center Pharmacy pursuant by the Amendment to Decision. This location was chosen since the electrical connection required to power the unit is located in the temporary vestibule, and access to the refrigerated unit is concealed from street view. All access to this refrigerated unit will be on foot from the Hospital building, through a building egress door located a few feet away from one end of the refrigerated unit. There will be no access to the refrigerated unit from Lincoln Street. The refrigerated unit is shown in the photograph attached hereto as Attachment A. The unit is 8 feet wide, 8 feet 6 inches high, and 19 feet 10 inches long at its base, with an above-grade mechanical (A/C) cabinet that extends 2 feet 1 inch beyond the end of the unit closest to Lincoln Street. The bottom of the mechanical cabinet is approximately 4 feet 11 inches above grade and the cabinet dimensions are 2 feet 1 inch long, by 3 feet wide, by 2 feet 6 inches high. The access door to the refrigerated unit is at the end of the unit closest to the Hospital building. The base of the temporary refrigerated unit is set back approximately 7 feet 6 inches from the Lincoln Street property line, and the mechanical cabinet at its closest point is approximately 5 feet 5 inches from the property line.

To partially block the view of the refrigerated unit, temporary chain link fencing with fabric mesh screening has been placed across the driveway adjacent to the existing concrete faced fencing. This temporary chain link fencing was moved to this location from the other side of the semi-circular driveway where it had been installed previously pursuant to the Amendment to Decision in order to partially screen the temporary pharmacy structure. As noted above, the temporary pharmacy structure has been removed from the Hospital property. The vestibule that connected the temporary pharmacy structure to the Building remains, however, and the side of the vestibule facing Lincoln Street is unattractive following the temporary pharmacy's removal. To improve the appearance of the temporary vestibule for the time being, the Hospital intends to replace the white vinyl clapboard siding

Town of Needham Planning Board May 4, 2020 Page 3 of 5

on the sides of the vestibule, which had been partially removed during the removal of the temporary pharmacy. The Hospital also proposes to extend that white clapboard siding so that it covers the Lincoln Street face of the vestibule. This front face previously abutted the temporary pharmacy structure so it was not visible and did not need an exterior skin. It is now covered in a green colored watertight "zip system" and its appearance will be improved by installing the white clapboard material that was previously approved for the sides of the vestibule.

Due to the rapidly evolving crisis and increasing shortages of necessary equipment, including refrigerated mobile units, the Hospital took steps to procure and install the refrigerated unit as soon as possible as part of its surge preparations during the past several weeks. At the time of installation the Hospital emailed Lincoln Street neighbors to let them know the Hospital was planning to maintain a temporary unit on the Lincoln Street side of the building until the pandemic subsides, as part of temporary changes to operations needed to respond to the pandemic. We are now seeking permission from the Planning Board for this refrigerated unit to be maintained by the Hospital at this location up to the extended expiration date of the Amendment to Decision being proposed (discussed below).

We are also requesting permission for the Hospital, up to the extended date of the Amendment to Decision, to be given the flexibility to elect to remove the temporary refrigerated unit during any period when the Hospital determines it is not needed, and to have the option to reinstall a temporary refrigerated unit of similar size in the same location during any period if and when the Hospital determines there is again a need. This flexibility is needed since it is possible there could be more than one surge of COVID-19 cases during the pandemic. In addition, the Hospital seeks permission, if and when the Hospital is not maintaining a temporary refrigerated unit on site during the public health emergency, to alternatively use the area adjacent to the temporary vestibule to install a single temporary unit to be devoted to other COVID-19 related purposes (for example, for a mobile CT scanner or other diagnostic purposes). Such alternative temporary unit would be no larger than the temporary Cancer Center pharmacy unit permitted by the Amendment to Decision. We do not currently foresee the need to temporarily replace (e.g., due to equipment failure) or expand our CT or other radiologic or other diagnostic procedure space; however, the Hospital is seeking the flexibility to use this temporary unit location, and the electrical hookups and infrastructure of the temporary vestibule, to best support the Hospital's response to COVID-19 as this public health emergency continues. If the Hospital were to install and utilize a temporary unit for diagnostic or other purposes in this location, all staff and patient access and any deliveries to such a temporary unit would be from the Hospital building through the vestibule, and not from Lincoln Street.

Town of Needham Planning Board May 4, 2020 Page 4 of 5

Extension: The Hospital further requests that the deadline in Section 3.3 of the Amendment to Decision for removal of the temporary improvements (including any temporary unit/structure permitted pursuant to this Application and the vestibule) and the restoration of the property to its prior condition be extended until November 15, 2020, or sixty (60) days after the end of the State of Emergency, whichever is later. We note that responding to the COVID-19 crisis is taxing all of the Hospital's resources to an unprecedented degree. For that reason the Hospital is seeking a reasonable amount of time to accomplish the removal of the temporary improvements and restoration of the area after the public health emergency is over.

This request for the temporary extension of the Amendment to Decision and its removal and restoration obligations is specifically needed to support the Hospital's COVID-19 response. We note, however, the Hospital's experience with the COVID-19 response has demonstrated the benefits of having the vestibule and its utility hook-ups available to readily activate a temporary unit if necessary due to emergency circumstances that may arise in the future. If the vestibule were to be maintained long term, the Hospital could quickly access and install temporary replacement radiology equipment such as a mobile CT scan or other critical care services. Without this capacity in the event of such an emergency equipment failure, other facilities and patient care services in the Hospital could need to be suspended for several weeks in order to recreate the utility connections and weather-protected patient access to a temporary unit that the existing vestibule provides. Thus, prior to performing the removal of the vestibule and restoration to the prior condition as required by the Amendment to Decision, the Hospital intends to study the ongoing need for the vestibule, as well as modifications and enhancements to the vestibule and associated improvements that could be made it if it were to become a permanent structure. The Hospital will consult with the Planning Department and Planning Board further about this matter before filing an application for any further modification or extension of the Amendment to Decision regarding the vestibule.

Due to the minor nature of the proposed amendment, we ask that you make a finding that this request be treated as a minor modification not requiring a public hearing. The Hospital believes the current State of Emergency clearly constitutes good cause for the Hospital's requests for minor modification and extension of the Amended Decision. For all the reasons stated above, the Hospital respectfully asks that the Planning Board approve the minor modification and extension of the Amended Decision requested by the Hospital as contained herein.

Town of Needham Planning Board May 4, 2020 Page 5 of 5

As part of the Application for further Site Plan Review enclosed please find the following:

- 1. Application for Further Site Plan Review;
- 2. Attachment A Photograph of temporary refrigerated unit/structure; and
- 3. Photocopy of check payable to the Town of Needham in the amount of \$250 representing the filing fee for Application for Further Site Plan Review.

The Hospital hereby requests, pursuant to Needham Zoning By-law Section 7.4.4., that the Planning Board waive the submission by the Hospital of any required information not submitted herewith.

If you have any questions or need any further information, please do not hesitate to contact John Fogarty, the President of the Hospital (Email: jmfogart@bidneedham.org; Phone: 781-453-3002), or me (Email: Elizabeth.Gerlach@bilh.org; Phone: 617-667-8596).

Thank you for your consideration.

Sincerely,

Elizabeth H. Gerlach

Senior Counsel, Office of General Counsel

Elizabeth H. Merlach

Beth Israel Lahey Health

cc: BY EMAIL

Tedi Eaton, Needham Town Clerk

Dave Roche, Needham Building Inspector

Alexandra Clee, Assistant Town Planner

John Fogarty, President, Beth Israel Deaconess Hospital - Needham

Nancy Hoffman, Chief Financial Officer, Beth Israel Deaconess Hospital - Needham

TOWN OF NEEDHAM

MASSACHUSETTS



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

PLANNING BOARD

APPLICATION FOR SITE PLAN REVIEW

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 Name of Applicant Beth Israel Deaconess Hospital - Needham, Inc. 148 Chestnut Street, Needham, MA 02492 Applicant is: Owner x Tenant Purchaser Property Owner's Name Beth Israel Deaconess Hospital - Needham, Inc. 148 Chestnut Street, Needham, MA 02492 Property Owner's Name Beth Israel Deaconess Hospital - Needham, Inc. 148 Chestnut Street, Needham, MA 02492 Telephone Number 781 453 3000 Characteristics of Property: Lot Area 193,354 SF Present Use Hospital Map # 47 Parcel # 55 Zoning District Medical Overlay District Description of Project for Site Plan Review under Section 7.4 of the Zoning By-Law: See Exhibit A attached hereto and made a part hereof. Signature of Applicant (or representative) Elizabeth H. Gerlach, Senior Counsel Address if not applicant Beth Israel Lahey Health, Office of General Counsel, 109 Brookline Ave., Suite 300, Boston, MA 02215 Telephone # 617 667 1886 Owner's permission if other than applicant John M. Fogarty, President and Chief Executive Officer SUMMARY OF PLANNING BOARD ACTION Received by Planning Board Parties of Interest Notified of Public Hearing Decision Required by Decision Notices of Decision sent Granted Denied Fee Paid Fee Waived Withdrawn	Project Determination: (circle one) Major Project Minor Project
Beth Israel Deaconess Hospital - Needham, Inc. 148 Chestnut Street, Needham, MA 02492	his representative in accordance with the Planning Board's Rules as adopted under its jurisdiction
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Withdrawn	Decision Required by Decision/Notices of Decision sent
Withdrawn	Granted
Withdrawn	Denied Fee Paid Fee waived
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NOTE: Reports on Minor Projects must be issues within 35 days of filing date.	NOTE: Reports on Minor Projects must be issues within 35 days of filing date.

EXHIBIT A

The Applicant requests a minor modification and extension to the Amendment to Special Permit Decision dated March 5, 2019, Application No. 2007-10 (granted for the construction and use of a temporary vestibule and pharmacy structure at the Hospital's former Emergency Department entrance on Lincoln Street) as follows:

<u>Minor Modification:</u> The Hospital requests the Amendment of Decision be modified to allow the installation, adjacent to the existing temporary vestibule, of a temporary unit/structure to be used for COVID-19 related Hospital uses, such unit to be a temporary refrigerated unit/structure or a temporary unit/structure for another COVID-19 related purpose, as the Applicant determines may be needed from time to time.

Extension: The Applicant also requests that the deadline set forth in Section 3.3 of the Amendment to Decision for removal of the temporary improvements (including any such temporary unit/structure and the vestibule) and the restoration of the property to its prior condition be extended until November 15, 2020, or sixty (60) days after the end of the Governor's declared state of emergency, whichever is later.

Beth Israel Deaconess Hospital - Needham Letter to Needham Planning Board - Application for Further Site Plan Review (Request for Minor Modification and Extension) 05.04.20

Attachment A - Photo of Temporary Refrigerated Unit/Structure from Lincoln Street





May 8, 2020

To Abutters:

On May 19, 2020, the Planning Board will review a proposal by Beth Israel Deaconess Hospital – Needham, Inc., property owner for 148 Chestnut Street to permit the Petitioner to modify the Amendment of Decision (which permitted the construction of a temporary covered vestibule and installation of a temporary compounding pharmacy structure and associated improvements) to allow the installation of a temporary refrigerated unit (or an alternate temporary unit if needed), adjacent to the existing temporary vestibule, to be used for COVID-19 related Hospital uses, as further described in the application materials filed with the Planning Board. This location was chosen since the electrical connection required to power the unit is located in the temporary vestibule, and access to the refrigerated unit is concealed from street view. All access to this refrigerated unit will be on foot from the Hospital building, through a building egress door located a few feet away from one end of the refrigerated unit. There will be no access to the refrigerated unit from Lincoln Street. The refrigerated unit is shown in the photograph attached below (which is included in the Application in Attachment A). The Applicant further requests that the deadline set forth in Section 3.3 of the Amendment to Decision for removal of temporary improvements (including the refrigerated unit or any alternate unit, and the vestibule) and the restoration of the property to its prior condition be extended until November 15, 2020, or sixty (60) days after the end of the Governor's declared state of emergency, whichever is later.



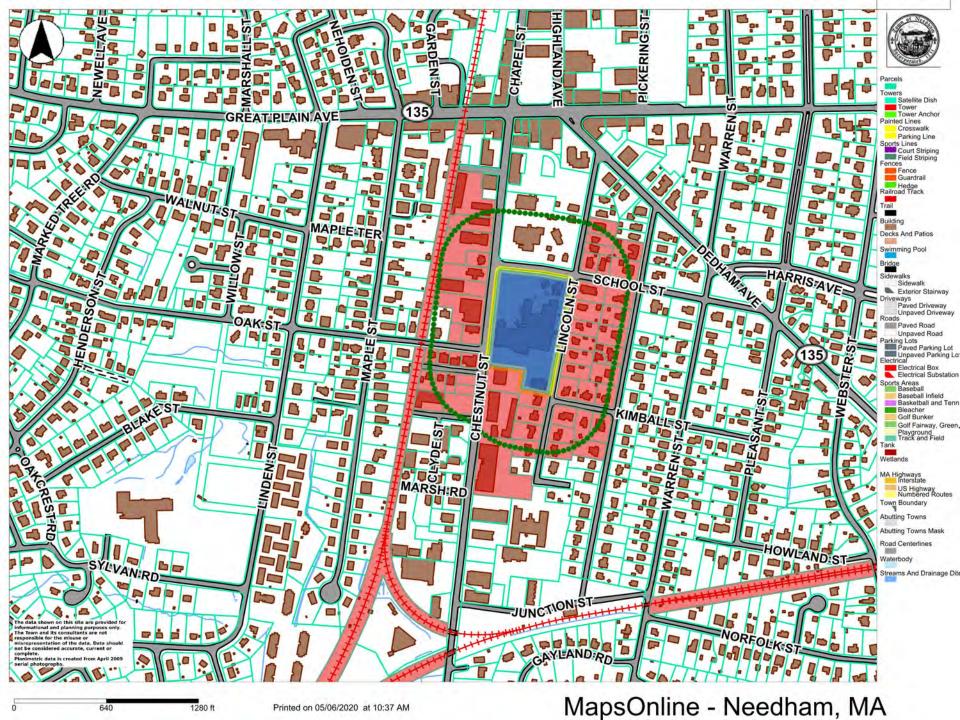
Interested persons may attend the Planning Board meeting to learn more about the proposal, to ask questions and/or to share your opinion with the Planning Board. The Planning Board has scheduled this matter for Tuesday, May 19, 2020 at 7:20 p.m. with Zoom ID Meeting/Webinar ID: 826-5899-3198 or use this link: https://us02web.zoom.us/j/82658993198

You may submit comments or ask questions of Planning Staff by leaving a voicemail at 781-455-7550 Ext 271 or emailing lnewman@needhamma.gov or aclee@needhamma.gov.

Very truly yours,

NEEDHAM PLANNING BOARD

Lee Newman, Director of Planning and Community Development



DEACONESS-GLOVER C/O HOFFMAN, NANCY 148 CHESTNUT ST NEEDHAM, MA 02492	MASS BAY TRANSPORTATION 10 PARK PLAZA BOSTON, MA 02116	COX, CHRISTOPHER & COX, JULIE 62 KIMBALL ST NEEDHAM, MA 02492
DEUTSCH, HOWARD & DEUTSCH, ALEXIS 68 KIMBALL ST NEEDHAM, MA 02492	LONDON, EILEEN M. ,TR. THE GRANT REALTY TRUST 103 GRANT ST NEEDHAM, MA 02492	MEZHEBOVSKY, VADIM 138 LINCOLN ST NEEDHAM, MA 02492
HEINZ, KARL P. 132 LINCOLN ST NEEDHAM, MA 02492	BALMER, CHRISTINE & BALMER, JAMES 76 KIMBALL ST NEEDHAM, MA 02492	FAHEY, LIAM + FAHEY, 115 LINCOLN ST REAL 115 LINCOLN ST NEEDHAM, MA 02492
HUARD, ROBERT F. & HUARD, MARION T. 123 LINCOLN ST NEEDHAM, MA 02492	REIDY SUZANNE J. 129 LINCOLN ST NEEDHAM, MA 02492	PAGANO, GRACE 137 LINCOLN ST NEEDHAM, MA 02492
PETRINI, L. & SON INC 187 ROSEMARY ST NEEDHAM, MA 02494	MALONE, JOHN E TRUSTEE JOHN E. MALONE REALTY 20 CHESTNUT ST, SUITE 4 NEEDHAM, MA 02492	DEACONESS-GLOVER 148 CHESTNUT ST NEEDHAM, MA 02492
DEACONESS-GLOVER C/O HOFFMAN, NANCY 148 CHESTNUT ST NEEDHAM, MA 02492	DEACONESS-GLOVER C/O HOFFMAN, NANCY 148 CHESTNUT ST NEEDHAM, MA 02492	DASUCO INC. TR. DASUCO FREEMAN PLACE 20 FREEMAN PL NEEDHAM, MA 02492
BERNARD, JOHN A. + BERNARD, GERTRUDE W. 72 PAUL REVERE RD NEEDHAM HTS, MA 02494	EEYORE PRODUCTIONS INC. 146 WARREN ST NEEDHAM, MA 02492	MALONE, JOHN E TRUSTEE JOHN E. MALONE REALTY 20 CHESTNUT ST, SUITE 4 NEEDHAM, MA 02492
BRAMLEA CONDOMINIUM BRIAN P. MCPHEARSON, 17 GRANT ST NEEDHAM, MA 02492	COSTELLO, PAUL 19 GRANT ST NEEDHAM, MA 02492	MCENERNY, MARYCLARE, 27 GRANT ST NEEDHAM, MA 02492
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MAYO, ANTHONY J. & 61 GRANT ST NEEDHAM, MA 02492	NG, YUEN TIN & CHEUNG, YAT KAI NG 65 GRANT ST	KATZ, JEFFREY A. & KATZ, LAURA L. 105 MEETINGHOUSE CIR

NEEDHAM, MA 02492

NEEDHAM, MA 02492

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105 CHESTNUT ST UNIT 12

NEEDHAM, MA 02492

NEEDHAM, MA 02492

105 CHESTNUT ST, UNIT 11

NEEDHAM, MA 02492

RAFFOL, KENNETH & ALPERT LAW LLC ALPERT, HEIDI B. HIGH ROCK REALTY TRUST 105 CHESTNUT ST. UNIT 17 105 CHESTNUT ST 105 CHESTNUT ST. UNIT 15 NEEDHAM, MA 02492 NEEDHAM, MA 02492 NEEDHAM, MA 02492 LONG, CHARLES W. HELM, STEPHEN B. TR. & HELM, ROBERT W.,TR. C/O HELM. W. JEFFREY TR. 105 CHESTNUT ST. UNIT 22 C/O HELM. W. JEFFREY 22 TICHNOR CT NEEDHAM, MA 02492 22 TICHNOR CT SCITUATE, MA 02066 SCITUATE, MA 02066 WEITZMAN, SIMON, TR. MAGIER, MARC J., TRUSTEE, WEITZMAN, SIMON L, TRS WEITZMAN MEDICAL REALTY SAMJAKE REALTY TRUST WEITZMAN MEDICAL REALTY 105 CHESTNUT ST 105 CHESTNUT ST 105 CHESTNUT ST NEEDHAM, MA 02492 NEEDHAM, MA 02494 NEEDHAM, MA 02492 RICKER, GEORGE R. + NEEDHAM ENTERPRISES LLC KISTLER, LAWRENCE & LINDSEY REALTY TRUST 1175 GREAT PLAIN AVE BALDWIN, JOHN S. 105 CHESTNUT ST UNIT 27 105 CHESTNUT ST UNIT 31 NEEDHAM, MA 02492 NEEDHAM, MA 02492 NEEDHAM, MA 02492 BONANNO, JOESPH J. & BONANNO, JOSEPH J., BONANNO, JOSEPH J.; C/O BONANNO, SAVINO, & DAVIES, TIMOTHY B.; TRS. DAVIES, TIMOTHY B, TRS 105 CHESTNUT ST UNIT 32 105 CHESTNUT ST, UNIT 32 105 CHESTNUT ST UNIT 34 NEEDHAM, MA 02492 NEEDHAM, MA 02492 NEEDHAM, MA 02492 O'DEA, JOHN & ZHOU, CHANGHONG & NATARAJAN, SOUNDARYA & HARBOR FAMILY TRUST ZHENG. LI SHASTRI, GANESH 105 CHESTNUT ST UNIT 21 105 CHESTNUT ST UNIT 36 105 CHESTNUT ST NEEDHAM, MA 02492 NEEDHAM, MA 02492 **UNIT 37A** NEEDHAM, MA 02492 TODOROV, OTTO BECKER, JEFFREY A. FITCHBURG FEDERAL 105 CHESTNUT ST #35 25 ALGONQUIAN DR LOAN ASSOCIATION NEEDHAM, MA 02492 SOUTH NATICK, MA 01760 130 WHALON ST FITCHBURG, MA 01420 NEW OPPORTUNITY, LLC GRANVILLE INVESTMENTS. **GRANVILLE INVESTMENTS LLC** 141 CHESTNUT ST 167 CHESTNUT ST 167 CHESTNUT ST NEEDHAM, MA 02492 NEEDHAM, MA 02492 NEEDHAM, MA 02492

173 CHESTNUT STREET LLC 12 EATON RD

NEEDHAM, MA 02492

PETRINI CORPORATION 187 ROSEMARY ST NEEDHAM, MA 02492

EV-ELMVIEW REALTY LLC 935 GREAT PLAIN AVE NEEDHAM, MA 02492

RICHARDS, PAUL C 14 OAK ST NEEDHAM, MA 02492 20 OAK STREET LLC 1116 GREAT PLAIN AVE SUITE 7 NEEDHAM, MA 02492



CERTIFICATE OF MAILING

I, Elizabeth H. Gerlach, do hereby certify that I am Senior Counsel in the Office of General Counsel of Beth Israel Lahey Health and that I am counsel to Beth Israel Deaconess Hospital — Needham, Inc. in connection with its Application for Further Site Plan Review requesting minor modification and extension to Amendment to Special Permit Decision dated March 5, 2019, which Application was submitted to the Needham Planning Board on May 4, 2020.

I further certify that on May 8, 2020 I mailed the Needham Planning Board notice which is attached hereto as Exhibit A, by regular first class mail deposited at the United States Post Office located at 63 Lincoln Street, Newton Highlands, MA 02461 to each of the persons listed on the abutter's list attached hereto as Exhibit B, which list was provided to me by the Needham Planning Department.

Attest:

Elizabeth H. Gerlach

Senior Counsel

Beth Israel Lahey Health

Office of General Counsel

109 Brookline Avenue, Suite 300

Boston, Massachusetts 02215

Date: May 8, 2020



May 8, 2020

To Abutters:

On May 19, 2020, the Planning Board will review a proposal by Beth Israel Deaconess Hospital – Needham, Inc., property owner for 148 Chestnut Street to permit the Petitioner to modify the Amendment of Decision (which permitted the construction of a temporary covered vestibule and installation of a temporary compounding pharmacy structure and associated improvements) to allow the installation of a temporary refrigerated unit (or an alternate temporary unit if needed), adjacent to the existing temporary vestibule, to be used for COVID-19 related Hospital uses, as further described in the application materials filed with the Planning Board. This location was chosen since the electrical connection required to power the unit is located in the temporary vestibule, and access to the refrigerated unit is concealed from street view. All access to this refrigerated unit will be on foot from the Hospital building, through a building egress door located a few feet away from one end of the refrigerated unit. There will be no access to the refrigerated unit from Lincoln Street. The refrigerated unit is shown in the photograph attached below (which is included in the Application in Attachment A). The Applicant further requests that the deadline set forth in Section 3.3 of the Amendment to Decision for removal of temporary improvements (including the refrigerated unit or any alternate unit, and the vestibule) and the restoration of the property to its prior condition be extended until November 15, 2020, or sixty (60) days after the end of the Governor's declared state of emergency, whichever is later.



Interested persons may attend the Planning Board meeting to learn more about the proposal, to ask questions and/or to share your opinion with the Planning Board. The Planning Board has scheduled this matter for Tuesday, May 19, 2020 at 7:20 p.m. with Zoom ID Meeting/Webinar ID: 826-5899-3198 or use this link: https://us02web.zoom.us/j/82658993198

You may submit comments or ask questions of Planning Staff by leaving a voicemail at 781-455-7550 Ext 271 or emailing lnewman@needhamma.gov or aclee@needhamma.gov.

Very truly yours,

NEEDHAM PLANNING BOARD

Lee Newman, Director of Planning and Community Development

EXHIBIT B- ABUTTER'S LIST

DEACONESS-GLOVER C/O HOFFMAN, NANCY 148 CHESTNUT ST NEEDHAM, MA 02492 MASS BAY TRANSPORTATION 10 PARK PLAZA BOSTON, MA 02116 COX, CHRISTOPHER & COX, JULIE 62 KIMBALL ST NEEDHAM, MA 02492

DEUTSCH, HOWARD & DEUTSCH, ALEXIS 68 KIMBALL ST NEEDHAM, MA 02492 LONDON, EILEEN M., TR. THE GRANT REALTY TRUST 103 GRANT ST NEEDHAM, MA 02492 MEZHEBOVSKY, VADIM 138 LINCOLN ST NEEDHAM, MA 02492

HEINZ, KARL P. 132 LINCOLN ST NEEDHAM, MA 02492

BALMER, CHRISTINE & BALMER, JAMES 76 KIMBALL ST NEEDHAM, MA 02492

FAHEY, LIAM + FAHEY, 115 LINCOLN ST REAL 115 LINCOLN ST NEEDHAM, MA 02492

HUARD, ROBERT F. & HUARD, MARION T. 123 LINCOLN ST NEEDHAM, MA 02492 REIDY SUZANNE J. 129 LINCOLN ST NEEDHAM, MA 02492 PAGANO, GRACE 137 LINCOLN ST NEEDHAM, MA 02492

PETRINI, L, & SON INC 187 ROSEMARY ST NEEDHAM, MA 02494 MALONE, JOHN E TRUSTEE JOHN E. MALONE REALTY 20 CHESTNUT ST. SUITE 4 NEEDHAM, MA 02492 DEACONESS-GLOVER 148 CHESTAUT ST NEEDHAM, MA 02492

DEACONESS-GLOVER C/O HOPEMAN, NANCY 148 CHESTAUT ST NEEDHAM, MA 02492

DEACONESS-GLOVER C/O HOFFMAN, NANCY 148 CHESTNOT ST NEEDHAM, MA 02492

DASUCO INC. TR. DASUCO FREEMAN PLACE 20 FREEMAN PL NEEDHAM, MA 02492

BERNARD, JOHN A. + BERNARD, GERTRUDE W. 72 PAUL REVERE RD NEEDHAM HTS, MA 02494

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MCSHERRY, ANDREW J. & MCSHERRY, CHERYL L. 39 GRANT ST NEEDHAM, MA 02492

SULLIVAN, MICHAEL & SULLIVAN, DANIELLE 45 GRANT ST NEEDHAM, MA 02492 DECKER, ERIC W. & DECKER, WENDY E.R. 55 GRANT ST NEEDHAM, MA 02492

MAYO, ANTHONY J. & 61 GRANT ST NEEDHAM, MA 02492 NG, YUEN TIN & CHEUNG, YAT KAI NG 65 GRANT ST NEEDHAM, MA 02492 KATZ, JEFFREY A. & KATZ, LAURA L. 105 MEETINGHOUSE CIR NEEDHAM, MA 02492

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105 CHESTNUT ST, UNIT 11

NEEDHAM, MA 02492

ALPERT, HEIDI B. ALPERT LAW LLC RAFFOL, KENNETH & 105 CHESTNUT ST, UNIT 17 105 CHESTNUT ST HIGH ROCK REALTY TRUST 105 CHESTNUT ST. UNIT 15 NEEDHAM, MA 02492 NEEDHAM, MA 02492 NEEDHAM, MA 02492 HELM, STEPHEN B. TR. & LONG, CHARLES W. HELM, ROBERT W., TR. 105 CHESTNUT ST. UNIT 22 C/O HELM, W. JEFFREY C/O HELM, W. JEFFREY TR. NEEDHAM, MA 02492 22 TICHNOR CT 22 TICHNOR CT SCITUATE, MA 02066 SCITUATE, MA 02066 WEITZMAN, SIMON, TR. MAGIER, MARC J., TRUSTEE, WEITZMAN, SIMON L. TRS SAMJAKE REALTY TRUST WEITZMAN MEDIGAL REALTY WEITZMAN MEDICAL REALTY 105 CHESTNUT ST 105 CHESTNUT ST 105 CHESTNUT ST NEEDHAM, MA 02494 NEEDHAM, MA 02492 NEEDHAM, MA 02492 NEEDHAM ENTERPRISES LLC KISTLER, LAWRENCE & RICKER, GEORGE R. + BALDWIN, JOHN S. LINDSEY REALTY TRUST 1175 GREAT PLAIN AVE 105 CHESTNUT ST UNIT 31 105 CHESTNUT ST UNIT 27 NEEDHAM, MA 02492 NEEDHAM, MA 02492 NEEDHAM, MA 02492 BONANNO, JOSEPH J., BONANNO, JOSEPH J.: BONANNO, JOESPH J. & DAVIES, TIMOTHY B.: TRS. C/O BONANNO, SAVINO, & DAVIES, TIMOTHY B. TRS 105 CHESTNUT ST UNIT 32 105 CHESTNUT ST, UNIT 32 1.05 CHESTNUT ST UNIT 34 NEEDHAM, MA 02492 NEEDHAM, MA 02492 NEEDHAM, MA 02492 O'DEA, JOHN & ZHOU, CHANGHONG & NATARAJAN, SOUNDARYA & HARBOR FAMILY TRUST SHASTRI, GANESH ZHENG LI 105 CHESTNUT ST UNIT 21 105 CHESTNUT ST UNIT 36 105 CHESTNUT ST UNIT 37A NEEDHAM, MA 02492 NEEDHAM, MA 02492 NEEDHAM, MA 02492 TODOROV, OTTO BECKER, JEFFREY A. FITCHBURG FEDERAL 105 CHESTNUT ST #35 25 ALGONQUIAN DR LOAN ASSOCIATION NEEDHAM, MA 02492 SOUTH NATICK, MA 01760 130 WHALON ST FITCHBURG, MA 01420 NEW OPPORTUNITY, LLC GRANVILLE INVESTMENTS, GRANVILLE INVESTMENTS LLC 167 CHESTNUT ST 141 CHESTNUT ST 167 CHESTNUT ST NEEDHAM, MA 02492 NEEDHAM, MA 02492 NEEDHAM, MA 02492 173 CHESTNUT STREET LLC PETRINI CORPORATION EV-ELMVIEW REALTY LLC 12 EATON RD 187 ROSEMARY ST 935 GREAT PLAIN AVE

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NEEDHAM, MA 02492

20 OAK STREET LLC 1116 GREAT PLAIN AVE SUITE 7 NEEDHAM, MA 02492 NEEDHAM, MA 02492

NEEDHAM, MA 02492

From: <u>Dennis Condon</u>

To: Alexandra Clee; Tara Gurge; John Schlittler; Anthony DelGaizo; Thomas Ryder

Cc: Lee Newman; Elisa Litchman

Subject: RE: Request for Comments on Planning Board Minor Modification - Beth Israel Deaconess Hospital

Date: Tuesday, May 5, 2020 10:39:53 AM

Attachments: <u>image004.png</u>

image005.png image008.png

Hi Alex.

We do not have an issue with this amendment.

Thanks, Dennis

Dennis Condon Chief of Department Needham Fire Department Town of Needham (W) 781-455-7580 (C) 508-813-5107

Dcondon@needhamma.gov



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From: Alexandra Clee <aclee@needhamma.gov>

Sent: Tuesday, May 05, 2020 9:54 AM

To: Tara Gurge <TGurge@needhamma.gov>; John Schlittler <JSchlittler@needhamma.gov>; Dennis Condon <DCondon@needhamma.gov>; Anthony DelGaizo <ADelgaizo@needhamma.gov>; Thomas Ryder <tryder@needhamma.gov>

Cc: Lee Newman < LNewman@needhamma.gov>; Elisa Litchman < elitchman@needhamma.gov> **Subject:** Request for Comments on Planning Board Minor Modification Application - Beth Israel Deaconess Hospital

Please find attached the application for a De Minimus Change for the Hospital.

The Petitioner proposes to modify the Amendment of Decision (which permitted the construction of a temporary covered vestibule and installation of a temporary compounding pharmacy structure and associated improvements) to allow the installation of a temporary refrigerated unit, adjacent to the

existing temporary vestibule, to be used for COVID-19 related Hospital uses, as further described in the application materials filed with the Planning Board. This location was chosen since the electrical connection required to power the unit is located in the temporary vestibule, and access to the refrigerated unit is concealed from street view. All access to this refrigerated unit will be on foot from the Hospital building, through a building egress door located a few feet away from one end of the refrigerated unit. There will be no access to the refrigerated unit from Lincoln Street. The refrigerated unit is shown in the photograph attached below (which is included in the Application in Attachment A).

Details of the proposal are included in the attached document.

The Planning Board will be reviewing this application at its meeting of May 19. If you can review the materials and provide your comments, that would be very helpful. If possible, please get your comments to us by end of business day Wednesday May 13 in order for your comments to be in the Board's packet. However, we understand everyone is busy and working under unusual circumstances; so if that timeline is not possible, please get us your comments before the meeting on May 19.

Thanks, alex.

From: Gerlach, Elizabeth (BILH - Legal) < <u>Elizabeth.Gerlach@bilh.org</u>>

Sent: Monday, May 4, 2020 3:54 PM

To: Lee Newman < <u>LNewman@needhamma.gov</u>>

Cc: Theodora Eaton <<u>TEaton@needhamma.gov</u>>; David Roche <<u>droche@needhamma.gov</u>>;

Alexandra Clee <aclee@needhamma.gov>; Fogarty,John (BIDMC - Needham)

<imfogart@bidneedham.org>; Hoffmann,Nancy (BIDN - Administration)

<nhoffman@bidneedham.org>

Subject: Beth Israel Deaconess Hospital - Needham: Application for Further Site Plan Review - Request for Minor Modification and Extension of Temporary Pharmacy Amendment to Decision

Ms. Newman:

Attached please find Beth Israel Deaconess Hospital – Needham's Application for Further Site Plan Review. As set forth in the attached Application, the Hospital is requesting for good cause a minor modification and extension to the Amendment to Special Permit Decision dated March 5, 2019, Application No. 2007-10 ("Amendment to Decision") that was granted for the construction and use of a temporary vestibule and pharmacy structure.

An original copy of this filing is being mailed today to the Needham Planning Department addressed to your attention, and the filing fee was dropped off earlier today in the drop box at the Public Services Administration Building.

Our understanding is that this matter will be on the Planning Board agenda on May 19, 2020. We look forward to reviewing this with the Planning Board at that time.

If you have any questions about the attached filing, please do not hesitate to contact me by phone or email. I am working remotely at present, but I do monitor my voicemail box.

Thank you for your consideration.

Best regards, Betsy

Elizabeth H. Gerlach

Senior Counsel and Director of Real Estate Development & Land Use Planning Beth Israel Lahey Health, Inc.

P: (617) 667-1886 | F: (617) 667-1736 Office of the General Counsel 109 Brookline Avenue, Suite 300, Boston, MA 02215 Elizabeth.Gerlach@bilh.org



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MEMO

Lee Newman, Planning Department From: Tara Gurge, Public Health Division

Date: 5/18/2020

Re: Comments on Planning Board Minor Modification Application - Beth Israel Deaconess Hospital

This memo is in reference to the Public Health Division request for comments on the Planning Board's Minor Modification Application for Beth Israel Deaconess Hospital.

The following is a list of Public Health Division comments regarding this proposal:

- We would like to stress the importance of having restricted and tight security access to this refrigeration unit.
- We would strongly recommend that this refrigeration unit be monitored (daily manual temp. checks/remote sensor) to ensure correct cold-holding temperature ranges are being maintained.
- Please ensure the refrigeration unit is vented properly and is provided with proper condensate drainage (if applicable) per equipment requirements, to ensure unit can function properly and remain in good repair in order to maintain proper temperatures.
- We would request that this refrigeration unit be hooked up to a back-up generator.
- Please ensure that the refrigerator unit/generator noise produced would be minimal and not cause a public health nuisance concern to abutting neighbors.

Please feel free to contact the Public Health Division office if you have any additional questions on those requirements.

AMENDMENT TO DECISION May 1920, 2020 Application No. 2007-10

MAJOR PROJECT SITE PLAN SPECIAL PERMIT Beth Israel Deaconess Hospital Needham, Inc. 148 Chestnut Street, Needham, MA

(Original Decision dated November 13, 2007, revised July 28, 2009, July 12, 2011, September 20, 2011, December 4, 2012, October 24, 2017 and March 5, 2019)

(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 Beth Israel Deaconess Hospital-Needham, Inc. ("BIDN" or the "Hospital") 148 Chestnut Street, Needham, MA, 02492, (the "Petitioner") for property located at 148 Chestnut Street, Needham, MA, 02492 (the "Property"). Said property is shown on Needham Town Assessors Plan No. 47 as Parcel No. 55, containing approximately 193,354 square feet in total.

This decision is in response to an application ("Application") submitted to the Board on May 4, 2020, by the Petitioner for: (1) a Major Project Site Plan Special Permit Amendment under Section 7.4 of the Needham Zoning By-Law (the "By-Law") and Section 4.2 of Major Project Site Plan Special Permit No. 2007-10, dated December 4, 2012; and (2) a Special Permit under Section 1.4.6 of the By-Law for the structural alteration, enlargement and/or reconstruction of a non-conforming structure.

The requested Major Project Site Plan Special Permit, would, if granted, permit the Petitioner to modify the Amendment of Decision (which permitted the construction of a temporary covered vestibule and installation of a temporary compounding pharmacy structure and associated improvements) to allow the installation of a temporary refrigerated unit (or an alternate temporary unit if needed), adjacent to the existing temporary vestibule, to be used for COVID-19 related Hospital uses.

The changes requested are deemed minor in nature and extent and do not require a public notice or a public hearing. Testimony and documentary evidence were presented to the Board on Tuesday, May 4920, 2020 via remote meeting using Zoom ID 826-5899-3198. Board members Martin Jacobs, Jeanne S. McKnight, Paul S. Alpert, Bruce Eisenhut, and Ted Owens were present throughout the proceedings. The record of the proceedings and the submissions upon which this decision is based may be referred to in the office of the Town Clerk or the office of the Board.

Submitted for the Board's deliberation prior to the close of the public hearing were the following exhibits:

Exhibit 1 - Properly executed Application for Further Site Plan Review completed by the Petitioner, with Attachment A, dated May 4, 2020 (the "Application").

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Needham Planning Board Decision – Beth Israel Deaconess Hospital-Needham, Inc. May 4920, 2020

- Exhibit 2 Letter to Planning Board Members from Attorney Elizabeth H. Gerlach, Senior Counsel and Director of Real Estate Development & Land Use Planning, Beth Israel Lahey Health, dated May 4, 2020.
- Exhibit 3 Plan entitled "As-Built Plan, Beth Israel Deaconess Hospital Needham, Inc.," prepared by Feldman Land Surveyors, 112 Shawmut Avenue, Boston, MA 02118, dated September 6, 2006, revised June 26, 2014 and July 11, 2014.
- Exhibit 4 Plan entitled "Plot Plan, Beth Israel Deaconess Hospital Needham, Inc.," prepared by Feldman Land Surveyors, 112 Shawmut Avenue, Boston, MA 02118, dated December 21, 2018
- Exhibit 5 Memorandum directed to Jerome Andaya, from Aaron M. Farbo, Cavanaugh Tocci, dated February 15, 2019, received February 25, 2019, regarding Environmental Sound Study.
- Exhibit 6 Interdepartmental Communications (IDC) to the Board from Dennis Condon, Chief of the Needham Fire Department, dated May 5, 2020; IDC to the Board from Thomas Ryder, Assistant Town Engineer, the Needham Department of Public Works, dated May xx, 2020; IDC to the Board from John Schlittler, Chief of Police Lieutenant John H. Kraemer, the Needham Police Department, dated May xx, 2020; and IDC to the Board from Tara Gurge, Assistant Public Health Director, dated May 15, 2020.

Exhibits 1, 2, 3 and 4 are hereinafter collectively referred to as the "Plan".

FINDINGS AND CONCLUSIONS

- 1.0 Based upon its review of the exhibits and the record of the proceedings, the Board found and concluded that:
- 1.1 The subject property is located in the Medical Overlay District at 148 Chestnut Street, Needham, MA, 02492, owned by Beth Israel Deaconess Hospital-Needham, Inc. Said property is shown on Needham Town Assessors Plan No. 47 as Parcel 55, containing approximately 193,354 square feet in total.
- 1.2 The subject property is currently occupied by the Hospital, and is identified as 148 Chestnut Street, Needham, MA. The Hospital has been operating at 148 Chestnut Street for over 100 years. The Town of Needham operated the Hospital for many years until its sale to the private sector in 1994. The last expansion to the Hospital was constructed pursuant to Amendment to Site Plan Special Permit No. 2007-10, dated October 24, 2017.
- 1.3 The Amendment to Decision dated March 5, 2019 allowed the construction of a temporary covered vestibule and installation of a temporary compounding pharmacy structure and associated improvements. Section 3.3 of said Amendment to Decision provides that the Hospital is obligated to remove the temporary compounding pharmacy, vestibule and other associated improvements and restore the property to its prior condition within one year of the issuance of the building permit for the permitted improvements, unless the Planning Board at the request of the Applicant determines the delay beyond one year is for good cause. Building Permit 120190306 was issued on March 28, 2019 to install the temporary pharmacy improvements. At present, the temporary pharmacy structure has been removed and the temporary vestibule remains on site.¹

¹ Pursuant to Section 17 of the Municipal Relief legislation (Chapter 53 of the Acts of 2020), expiration dates and deadlines for meeting permit conditions in land use permits, including the March 5, 2019 Amendment to Decision

1.4 The Petitioner requests the Amendment of Decision dated March 5, 2019 be modified to allow the installation of a temporary unit/structure, adjacent to the existing temporary vestibule, to be used for COVID-19 related Hospital uses, as further described below.

Out of caution and concern for the citizens of Needham and Hospital patients and families, The Petitioner was able to secure a refrigerated unit to be used as a temporary morgue during the COVID – 19 crises. The refrigerated unit, which the Petitioner hopes to use not at all or only rarely, has been located adjacent to the temporary vestibule that was constructed to serve the temporary Cancer Center Pharmacy pursuant by the Amendment to Decision. This location was chosen since the electrical connection required to power the unit is located in the temporary vestibule, and access to the refrigerated unit is concealed from street view.

All access to this refrigerated unit will be on foot from the Hospital building, through a building egress door located a few feet away from one end of the refrigerated unit. There will be no access to the refrigerated unit from Lincoln Street. The refrigerated unit is shown in the photograph attached to the application as Attachment A, and described in Exhibit 1. The unit is 8 feet wide, 8 feet 6 inches high, and 19 feet 10 inches long at its base, with an above-grade mechanical (A/C) cabinet that extends 2 feet 1 inch beyond the end of the unit closest to Lincoln Street. The bottom of the mechanical cabinet is approximately 4 feet 11 inches above grade and the cabinet dimensions are 2 feet 1 inch long, by 3 feet wide, by 2 feet 6 inches high. The access door to the refrigerated unit is at the end of the unit closest to the Hospital building. The base of the temporary refrigerated unit is set back approximately 7 feet 6 inches from the Lincoln Street property line, and the mechanical cabinet at its closest point is approximately 5 feet 5 inches from the property line.

To partially block the view of the refrigerated unit, temporary chain link fencing with fabric mesh screening has been placed across the driveway adjacent to the existing concrete faced fencing. This temporary chain link fencing was moved to this location from the other side of the semi-circular driveway where it had been installed previously pursuant to the Amendment to Decision in order to partially screen the temporary pharmacy structure. As noted above, the temporary pharmacy structure has been removed from the Hospital property. The vestibule that connected the temporary pharmacy structure to the Building remains, however, and the side of the vestibule facing Lincoln Street is unattractive following the temporary pharmacy's removal. To improve the appearance of the temporary vestibule for the time being, the Petitioner intends to replace the white vinyl clapboard siding on the sides of the vestibule, which had been partially removed during the removal of the temporary pharmacy. The Petitioner also proposes to extend that white clapboard siding so that it covers the Lincoln Street face of the vestibule. This front face previously abutted the temporary pharmacy structure so it was not visible and did not need an exterior skin. It is now covered in a green colored watertight "zip system" and its appearance will be improved by installing the white clapboard material that was previously approved for the sides of the vestibule.

Due to the rapidly evolving crisis and increasing shortages of necessary equipment, including refrigerated mobile units, the Petitioner took steps to procure and install the refrigerated unit as soon as possible as part of its surge preparations during the past several weeks. At the time of installation, the Petitioner emailed Lincoln Street neighbors to let them know the Hospital was

and the noted Building Permit, are tolled during the state of emergency to respond to COVID-19 declared by the Governor on March 10, 2020 (the "State of Emergency").

planning to maintain a temporary unit on the Lincoln Street side of the building until the pandemic subsides, as part of temporary changes to operations needed to respond to the pandemic.

The Petitioner is now seeking permission from the Planning Board for this refrigerated unit to be maintained by the Petitioner at this location up to the extended expiration date of the Amendment to Decision.

1.5 The Petitioner is also requesting permission for the Hospital, up to the extended date of the Amendment to Decision, to be given the flexibility to elect to remove the temporary refrigerated unit during any period when the Petitioner determines it is not needed, and to have the option to reinstall a temporary refrigerated unit of similar size in the same location during any period if and when the Petitioner determines there is again a need. This flexibility is needed since it is possible there could be more than one surge of COVID-19 cases during the pandemic.

In addition, the Petitioner seeks permission, if and when the Petitioner is not maintaining a temporary refrigerated unit on site during the public health emergency, to alternatively use the area adjacent to the temporary vestibule to install a single temporary unit to be devoted to other COVID-19 related purposes (for example, for a mobile CT scanner or other diagnostic purposes). Such alternative temporary unit would be no larger than the temporary Cancer Center pharmacy unit permitted by the Amendment to Decision. While the Petitioner does not currently foresee the need to temporarily replace (e.g., due to equipment failure) or expand our CT or other radiologic or other diagnostic procedure space, the Petitioner is seeking the flexibility to use this temporary unit location, and the electrical hook-ups and infrastructure of the temporary vestibule, to best support the Petitioner's response to COVID-19 as this public health emergency continues. If the Petitioner were to install and utilize a temporary unit for diagnostic or other purposes in this location, all staff and patient access and any deliveries to such a temporary unit would be from the Hospital building through the vestibule, and not from Lincoln Street.

1.6 Section 3.3 of the March 5, 2019 Amendment to Decision stated, in part: "The temporary compounding pharmacy and any other associated improvements shall be removed from the site and the property shall be returned to its current condition within one year of the issuance of a building permit, unless the Board, at the request of the Applicant, determines that the delay beyond one year is for good cause.

The Petitioner further requests that the deadline in Section 3.3 of the March 5, 2019 Amendment to Decision for removal of the temporary improvements (including any temporary unit/structure permitted pursuant to this Application and the vestibule) and the restoration of the property to its prior condition be extended until November 15, 2020, or sixty (60) days after the end of the State of Emergency, whichever is later.

1.7 As indicated in the October 24, 2017 Amendment Decision, the Property conforms to zoning requirements as to lot area and frontage. The temporary structure will comply with the following applicable dimensional and density requirements of the Medical District Overlay Zoning District side and rear setback, maximum building height, maximum lot coverage, floor area ratio, and open space.

The existing Hospital building is a legal, pre-existing, non-conforming structure because of the location of the existing canopy at the former Emergency Department entrance located on Lincoln Street. The minimum front setback on Lincoln Street is 30 feet. At its closest point, the existing canopy and related support structures are currently approximately 9.1 feet from the Lincoln Street

property line. The Hospital structure is a legal, pre-existing, non-conforming structure, which has been recognized in prior applications and decisions. The base of the temporary refrigerated unit is set back approximately 7 feet 6 inches from the Lincoln Street property line, and the mechanical cabinet at its closest point is approximately 5 feet 5 inches from the property line.

- 1.8 Access to the temporary refrigeration unit is only proposed from inside the Hospital. No access is proposed to be from the outside or from Lincoln Street.
- 1.9 As detailed in Exhibit 5 above, an Environmental Sound Study was provided for the temporary pharmacy which stated that the new HVAC equipment sound emissions associated with the temporary pharmacy would comply with all applicable regulations, including the MassDEP tonal definition. An updated Environmental Sound Study for the refrigerated unit/generator was not provided with this application. The Planning Board has conditioned the requested amendment on the Petitioner providing an updated Environmental Sound Study which demonstrates that the projected sound level increase from the refrigerated unit/generator and associated equipment will comply with applicable regulations.
- 1.10 The Board finds that all of its findings, conclusions, conditions and limitations contained in Major Project Site Plan Review Special Permit No. 2007-10, dated November 13, 2007, revised July 28, 2009, July 12, 2011, September 20, 2011, December 4, 2012, October 24, 2017 and March 5, 2019 shall continue in full force and effect, with the exception of any conditions contained in this Decision.
- 1.11 Under Section 7.4 of the By-Law, a Major Project Site Plan Review Special Permit Amendment may be granted in the Medical Overlay 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.
- 1.12 Under Section 1.4.6 of the By-Law, a lawful pre-existing nonconforming building may be structurally altered only pursuant to a special permit issued by the Board pursuant to Section 7.5.2 provided that the Board determines such alteration would not be substantially more detrimental to the neighborhood than the existing non-conforming structure. On the basis of the above findings and criteria, the Board finds that the proposed alteration, as conditioned and limited herein, to be in harmony with the purposes and intent of the By-Law, to comply with all applicable By-Law requirements, and to not increase the existing non-conforming structure nor to be more detrimental to the neighborhood than the existing non-conforming structure.

THEREFORE, the Board voted 5-0 to GRANT: (1) the requested Major Project Site Plan Special Permit Amendment under Section 7.4 of the Needham Zoning By-Law and Section 4.2 of Major Project Site Plan Special Permit No. 2007-10, dated December 4, 2012; and (2) the requested Special Permit under Section 1.4.6 of the By-Law for the structural alteration, enlargement and/or reconstruction of a non-conforming structure, subject to the following plan modifications, conditions and limitations.

PLAN MODIFICATIONS

2.0 Prior to the issuance of a building permit or the start of any construction on the site, 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 nor shall he permit any construction

activity on the site to begin on the site until and unless he finds that the Plan is revised to include the following additional, corrected, or modified information as set forth below. 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 nine copies of the final Plans as approved for construction by the Building Inspector to the Board prior to the issuance of a Building Permit.

The Plan shall be modified as follows and shall be submitted to the Board for approval and endorsement, as set forth below: No plan modifications are required.

CONDITIONS

- 3.0 The following conditions of this approval shall be strictly adhered to. Failure to adhere to these conditions or to comply with all applicable laws and permit conditions shall give the Board the rights and remedies set forth in Section 3.12 hereof.
- 3.1 The temporary addition, landscape areas, and other site features shall be constructed in accordance with the Plan. Any other changes, revisions or modifications to the Plan shall require approval by the Board, unless otherwise stated in this Decision.
- 3.2 The proposed temporary addition and other exterior improvements shall contain the dimensions and shall be located on that portion of the locus as shown on the Plan, as modified by this Decision, and in accordance with the applicable dimensional requirements of the By-Law.
- 3.3 This permit is issued for the continued approval of the temporary removal of the existing canopy and construction of a temporary covered vestibule between the building entrance and the temporary refrigeration unit to provide a secure, enclosed area clearly separate from public space as further described in Sections 1.3 and 1.4 of this Decision. Additionally, this permit is issued for a temporary chain link fencing with fabric mesh screen to add security, and to partially block the view of the concrete faced fencing adjacent to it. Lastly, the whole assembly as noted above shall be removed, the canopy shall be restored to its current location, and the old emergency department entrance and driveway restored to its current condition by November 15, 2020, or sixty (60) days after the end of the State of Emergency, whichever is later. An as-built plan showing the restored condition shall be submitted to the Board for review and approval. The temporary structure and any other associated improvements shall be removed from the site and the property shall be returned to its current condition by November 15, 2020, or sixty (60) days after the end of the State of Emergency, whichever is later, unless the Board, at the request of the Applicant, determines that the delay beyond November 15, 2020 or 60 days after the State of Emergency, whichever is laterone year, is for good cause.
- 3.4 The following requirements of the Board of Health shall be met: (1) The Petitioner shall maintain restricted and tight security access to the refrigerated unit; (2) the refrigerated unit shall be monitored (daily manual temperature checks/remote sensor) to ensure correct cold-holding temperature ranges are being maintained; (3) the refrigerated unit shall be vented properly and shall be provided with proper condensate drainage (if applicable) per equipment requirements, to ensure the unit can function properly and remain in good repair in order to maintain proper temperatures; (4) the refrigerated unit shall be hooked up to a back-up generator; (5) the refrigerated unit/generator noise produced shall be minimal and shall not cause a public health nuisance concern to abutting neighbors.

- 3.5 An updated Environmental Sound Study for the refrigerated unit/generator and associated equipment shall be provided. The Planning Board has conditioned the requested amendment on the Petitioner providing an updated Environmental Sound Study which demonstrates that the projected sound level increase from the refrigerated unit/generator and associated equipment will comply with applicable sound regulations. The referenced sound study shall be submitted to the Planning Board for its review and approval within 45 days of the issuance of the subject permit.
- 3.6 To improve the appearance of the temporary vestibule for the time being, the Petitioner shall replace the white vinyl clapboard siding on the sides of the vestibule, which had been partially removed during the removal of the temporary pharmacy. The Petitioner shall also extend that white clapboard siding so that it covers the Lincoln Street face of the vestibule. The above noted improvement shall be completed with 45 days of the issuance of the subject permit.
- 3.7 The Petitioner shall receive the approval of the Design Review Board of the subject modification within 45 days of the issuance of the subject permit.
- 3.8 Hospital staffing shall not change as a result of the temporary structure.
- 3.9 All access to the refrigerated unit shall be on foot from the Hospital building, through a building egress door located a few feet away from one end of the refrigerated unit. There shall be no access to the refrigerated unit from Lincoln Street. No deliveries shall be done to the addition on Lincoln Street; all deliveries shall be done through the interior of the hospital. If the Petitioner however, were to install and utilize a temporary unit for diagnostic or other purposes in this location, all staff and patient access and any deliveries to such a temporary unit would be from the Hospital building through the vestibule, and not from Lincoln Street.
- 3.10 In addition to the provisions of this approval, the Petitioner must comply with all requirements of all state, federal, and local boards, commissions or other agencies, including, but not limited to, the Board of Selectmen, Building Inspector, Fire Department, Department of Public Works, Conservation Commission, Police Department, and Board of Health, pertaining to the Project.
- 3.11 The Petitioner, by accepting this permit decision, warrants that the Petitioner has included all relevant documentation, reports, and information available to the Petitioner in the application submitted, that this information is true and valid to the best of the Petitioner's knowledge.
- 3.12 Except as otherwise provided in this Decision, violation of any of the conditions of this Decision shall be grounds for revocation of any building permit or certificate of occupancy giving rise to the alleged violation: In the case of violation of any conditions of this Decision, the Town will notify the owner of such violation and give the owner reasonable time, not to exceed thirty (30) days, to cure the violation. If, at the end of said 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 Application. 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 with respect to the Project on May 19, 2021 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 March 19, 2021. The Board herein reserves its rights and powers to grant or deny such extension without a public hearing.²
- 4.7 This Decision shall be recorded at the Norfolk District Registry of Deeds. This Special Permit 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 of Deeds and until the Petitioner has delivered a certified copy of the recorded document to the Board.

The provisions of this Special Permit 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 of the Plan, as modified by this decision, 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 General Laws, Chapter 40A, Section 17, within twenty (20) days after filing of this decision with the Needham Town Clerk.

² Pursuant to Section 17 of the Municipal Relief legislation (Chapter 53 of the Acts of 2020), expiration dates and deadlines for meeting permit conditions in land use permits, including the subject March 19, 2020 Amendment to Decision and the noted Building Permit, are tolled during the state of emergency to respond to COVID-19 declared

by the Governor on March 10, 2020 (the "State of Emergency").				
Needham Planning Board Decision – Beth Israel Deaconess Hospital-Needham, Inc. May <u>1920</u> , 2020	9			

Witness our hands this 1920 th day of May,	2020	
NEEDHAM PLANNING BOARD		
Martin Jacobs Paul S. Alpert, Chairperson		
Jeanne S. McKnight, Vice-Chairperson		
Paul S. Alpert		
Bruce Eisenhut		
Γed Owens		
Copy sent to:		
Petitioner-Certified Mail # Design Review Board Building Inspector Conservation Commission Attorney Elizabeth H. Gerlach	Board of Selectmen Engineering Fire Department Police Department	Board of Health Town Clerk Director, PWD Parties in Interest

AMENDMENT TO DECISION May 20, 2020 Application No. 2007-10

MAJOR PROJECT SITE PLAN SPECIAL PERMIT

Beth Israel Deaconess Hospital Needham, Inc. 148 Chestnut Street, Needham, MA

(Original Decision dated November 13, 2007, revised July 28, 2009, July 12, 2011, September 20, 2011, December 4, 2012, October 24, 2017 and March 5, 2019)

(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 Beth Israel Deaconess Hospital-Needham, Inc. ("BIDN" or the "Hospital") 148 Chestnut Street, Needham, MA, 02492, (the "Petitioner") for property located at 148 Chestnut Street, Needham, MA, 02492 (the "Property"). Said property is shown on Needham Town Assessors Plan No. 47 as Parcel No. 55, containing approximately 193,354 square feet in total.

This decision is in response to an application ("Application") submitted to the Board on May 4, 2020, by the Petitioner for: (1) a Major Project Site Plan Special Permit Amendment under Section 7.4 of the Needham Zoning By-Law (the "By-Law") and Section 4.2 of Major Project Site Plan Special Permit No. 2007-10, dated December 4, 2012; and (2) a Special Permit under Section 1.4.6 of the By-Law for the structural alteration, enlargement and/or reconstruction of a non-conforming structure.

The requested Major Project Site Plan Special Permit, would, if granted, permit the Petitioner to modify the Amendment of Decision (which permitted the construction of a temporary covered vestibule and installation of a temporary compounding pharmacy structure and associated improvements) to allow the installation of a temporary refrigerated unit (or an alternate temporary unit if needed), adjacent to the existing temporary vestibule, to be used for COVID-19 related Hospital uses.

The changes requested are deemed minor in nature and extent and do not require a public notice or a public hearing. Testimony and documentary evidence were presented to the Board on Tuesday, May 20, 2020 via remote meeting using Zoom ID 826-5899-3198. Board members Martin Jacobs, Jeanne S. McKnight, Paul S. Alpert, Bruce Eisenhut, and Ted Owens were present throughout the proceedings. The record of the proceedings and the submissions upon which this decision is based may be referred to in the office of the Town Clerk or the office of the Board.

Submitted for the Board's deliberation prior to the close of the public hearing were the following exhibits:

Exhibit 1 - Properly executed Application for Further Site Plan Review completed by the Petitioner, with Attachment A, dated May 4, 2020 (the "Application").

- Exhibit 2 Letter to Planning Board Members from Attorney Elizabeth H. Gerlach, Senior Counsel and Director of Real Estate Development & Land Use Planning, Beth Israel Lahey Health, dated May 4, 2020.
- Exhibit 3 Plan entitled "As-Built Plan, Beth Israel Deaconess Hospital Needham, Inc.," prepared by Feldman Land Surveyors, 112 Shawmut Avenue, Boston, MA 02118, dated September 6, 2006, revised June 26, 2014 and July 11, 2014.
- Exhibit 4 Plan entitled "Plot Plan, Beth Israel Deaconess Hospital Needham, Inc.," prepared by Feldman Land Surveyors, 112 Shawmut Avenue, Boston, MA 02118, dated December 21, 2018.
- Exhibit 5 Memorandum directed to Jerome Andaya, from Aaron M. Farbo, Cavanaugh Tocci, dated February 15, 2019, received February 25, 2019, regarding Environmental Sound Study.
- Exhibit 6 Interdepartmental Communications (IDC) to the Board from Dennis Condon, Chief of the Needham Fire Department, dated May 5, 2020; IDC to the Board from Thomas Ryder, Assistant Town Engineer, the Needham Department of Public Works, dated May xx, 2020; IDC to the Board from John Schlittler, Chief of Police, Needham Police Department, dated May xx, 2020; and IDC to the Board from Tara Gurge, Assistant Public Health Director, dated May 15, 2020.

Exhibits 1, 2, 3 and 4 are hereinafter collectively referred to as the "Plan".

FINDINGS AND CONCLUSIONS

- 1.0 Based upon its review of the exhibits and the record of the proceedings, the Board found and concluded that:
- 1.1 The subject property is located in the Medical Overlay District at 148 Chestnut Street, Needham, MA, 02492, owned by Beth Israel Deaconess Hospital-Needham, Inc. Said property is shown on Needham Town Assessors Plan No. 47 as Parcel 55, containing approximately 193,354 square feet in total.
- 1.2 The subject property is currently occupied by the Hospital, and is identified as 148 Chestnut Street, Needham, MA. The Hospital has been operating at 148 Chestnut Street for over 100 years. The Town of Needham operated the Hospital for many years until its sale to the private sector in 1994. The last expansion to the Hospital was constructed pursuant to Amendment to Site Plan Special Permit No. 2007-10, dated October 24, 2017.
- 1.3 The Amendment to Decision dated March 5, 2019 allowed the construction of a temporary covered vestibule and installation of a temporary compounding pharmacy structure and associated improvements. Section 3.3 of said Amendment to Decision provides that the Hospital is obligated to remove the temporary compounding pharmacy, vestibule and other associated improvements and restore the property to its prior condition within one year of the issuance of the building permit for the permitted improvements, unless the Planning Board at the request of the Applicant determines the delay beyond one year is for good cause. Building Permit 120190306 was issued on March 28, 2019 to install the temporary pharmacy improvements. At present, the temporary pharmacy structure has been removed and the temporary vestibule remains on site.¹

Needham Planning Board Decision – Beth Israel Deaconess Hospital-Needham, Inc. May 20, 2020

¹ Pursuant to Section 17 of the Municipal Relief legislation (Chapter 53 of the Acts of 2020), expiration dates and deadlines for meeting permit conditions in land use permits, including the March 5, 2019 Amendment to Decision

1.4 The Petitioner requests the Amendment of Decision dated March 5, 2019 be modified to allow the installation of a temporary unit/structure, adjacent to the existing temporary vestibule, to be used for COVID-19 related Hospital uses, as further described below.

Out of caution and concern for the citizens of Needham and Hospital patients and families, The Petitioner was able to secure a refrigerated unit to be used as a temporary morgue during the COVID – 19 crises. The refrigerated unit, which the Petitioner hopes to use not at all or only rarely, has been located adjacent to the temporary vestibule that was constructed to serve the temporary Cancer Center Pharmacy pursuant by the Amendment to Decision. This location was chosen since the electrical connection required to power the unit is located in the temporary vestibule, and access to the refrigerated unit is concealed from street view.

All access to this refrigerated unit will be on foot from the Hospital building, through a building egress door located a few feet away from one end of the refrigerated unit. There will be no access to the refrigerated unit from Lincoln Street. The refrigerated unit is shown in the photograph attached to the application as Attachment A, and described in Exhibit 1. The unit is 8 feet wide, 8 feet 6 inches high, and 19 feet 10 inches long at its base, with an above-grade mechanical (A/C) cabinet that extends 2 feet 1 inch beyond the end of the unit closest to Lincoln Street. The bottom of the mechanical cabinet is approximately 4 feet 11 inches above grade and the cabinet dimensions are 2 feet 1 inch long, by 3 feet wide, by 2 feet 6 inches high. The access door to the refrigerated unit is at the end of the unit closest to the Hospital building. The base of the temporary refrigerated unit is set back approximately 7 feet 6 inches from the Lincoln Street property line, and the mechanical cabinet at its closest point is approximately 5 feet 5 inches from the property line.

To partially block the view of the refrigerated unit, temporary chain link fencing with fabric mesh screening has been placed across the driveway adjacent to the existing concrete faced fencing. This temporary chain link fencing was moved to this location from the other side of the semi-circular driveway where it had been installed previously pursuant to the Amendment to Decision in order to partially screen the temporary pharmacy structure. As noted above, the temporary pharmacy structure has been removed from the Hospital property. The vestibule that connected the temporary pharmacy structure to the Building remains, however, and the side of the vestibule facing Lincoln Street is unattractive following the temporary pharmacy's removal. To improve the appearance of the temporary vestibule for the time being, the Petitioner intends to replace the white vinyl clapboard siding on the sides of the vestibule, which had been partially removed during the removal of the temporary pharmacy. The Petitioner also proposes to extend that white clapboard siding so that it covers the Lincoln Street face of the vestibule. This front face previously abutted the temporary pharmacy structure so it was not visible and did not need an exterior skin. It is now covered in a green colored watertight "zip system" and its appearance will be improved by installing the white clapboard material that was previously approved for the sides of the vestibule.

Due to the rapidly evolving crisis and increasing shortages of necessary equipment, including refrigerated mobile units, the Petitioner took steps to procure and install the refrigerated unit as soon as possible as part of its surge preparations during the past several weeks. At the time of installation, the Petitioner emailed Lincoln Street neighbors to let them know the Hospital was

and the noted Building Permit, are tolled during the state of emergency to respond to COVID-19 declared by the Governor on March 10, 2020 (the "State of Emergency").

planning to maintain a temporary unit on the Lincoln Street side of the building until the pandemic subsides, as part of temporary changes to operations needed to respond to the pandemic.

The Petitioner is now seeking permission from the Planning Board for this refrigerated unit to be maintained by the Petitioner at this location up to the extended expiration date of the Amendment to Decision.

1.5 The Petitioner is also requesting permission for the Hospital, up to the extended date of the Amendment to Decision, to be given the flexibility to elect to remove the temporary refrigerated unit during any period when the Petitioner determines it is not needed, and to have the option to reinstall a temporary refrigerated unit of similar size in the same location during any period if and when the Petitioner determines there is again a need. This flexibility is needed since it is possible there could be more than one surge of COVID-19 cases during the pandemic.

In addition, the Petitioner seeks permission, if and when the Petitioner is not maintaining a temporary refrigerated unit on site during the public health emergency, to alternatively use the area adjacent to the temporary vestibule to install a single temporary unit to be devoted to other COVID-19 related purposes (for example, for a mobile CT scanner or other diagnostic purposes). Such alternative temporary unit would be no larger than the temporary Cancer Center pharmacy unit permitted by the Amendment to Decision. While the Petitioner does not currently foresee the need to temporarily replace (e.g., due to equipment failure) or expand our CT or other radiologic or other diagnostic procedure space, the Petitioner is seeking the flexibility to use this temporary unit location, and the electrical hook-ups and infrastructure of the temporary vestibule, to best support the Petitioner's response to COVID-19 as this public health emergency continues. If the Petitioner were to install and utilize a temporary unit for diagnostic or other purposes in this location, all staff and patient access and any deliveries to such a temporary unit would be from the Hospital building through the vestibule, and not from Lincoln Street.

1.6 Section 3.3 of the March 5, 2019 Amendment to Decision stated, in part: "The temporary compounding pharmacy and any other associated improvements shall be removed from the site and the property shall be returned to its current condition within one year of the issuance of a building permit, unless the Board, at the request of the Applicant, determines that the delay beyond one year is for good cause.

The Petitioner further requests that the deadline in Section 3.3 of the March 5, 2019 Amendment to Decision for removal of the temporary improvements (including any temporary unit/structure permitted pursuant to this Application and the vestibule) and the restoration of the property to its prior condition be extended until November 15, 2020, or sixty (60) days after the end of the State of Emergency, whichever is later.

1.7 As indicated in the October 24, 2017 Amendment Decision, the Property conforms to zoning requirements as to lot area and frontage. The temporary structure will comply with the following applicable dimensional and density requirements of the Medical District Overlay Zoning District side and rear setback, maximum building height, maximum lot coverage, floor area ratio, and open space.

The existing Hospital building is a legal, pre-existing, non-conforming structure because of the location of the existing canopy at the former Emergency Department entrance located on Lincoln Street. The minimum front setback on Lincoln Street is 30 feet. At its closest point, the existing canopy and related support structures are currently approximately 9.1 feet from the Lincoln Street

property line. The Hospital structure is a legal, pre-existing, non-conforming structure, which has been recognized in prior applications and decisions. The base of the temporary refrigerated unit is set back approximately 7 feet 6 inches from the Lincoln Street property line, and the mechanical cabinet at its closest point is approximately 5 feet 5 inches from the property line.

- 1.8 Access to the temporary refrigeration unit is only proposed from inside the Hospital. No access is proposed to be from the outside or from Lincoln Street.
- 1.9 As detailed in Exhibit 5 above, an Environmental Sound Study was provided for the temporary pharmacy which stated that the new HVAC equipment sound emissions associated with the temporary pharmacy would comply with all applicable regulations, including the MassDEP tonal definition. An updated Environmental Sound Study for the refrigerated unit/generator was not provided with this application. The Planning Board has conditioned the requested amendment on the Petitioner providing an updated Environmental Sound Study which demonstrates that the projected sound level increase from the refrigerated unit/ generator and associated equipment will comply with applicable regulations.
- 1.10 The Board finds that all of its findings, conclusions, conditions and limitations contained in Major Project Site Plan Review Special Permit No. 2007-10, dated November 13, 2007, revised July 28, 2009, July 12, 2011, September 20, 2011, December 4, 2012, October 24, 2017 and March 5, 2019 shall continue in full force and effect, with the exception of any conditions contained in this Decision.
- 1.11 Under Section 7.4 of the By-Law, a Major Project Site Plan Review Special Permit Amendment may be granted in the Medical Overlay 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.
- 1.12 Under Section 1.4.6 of the By-Law, a lawful pre-existing nonconforming building may be structurally altered only pursuant to a special permit issued by the Board pursuant to Section 7.5.2 provided that the Board determines such alteration would not be substantially more detrimental to the neighborhood than the existing non-conforming structure. On the basis of the above findings and criteria, the Board finds that the proposed alteration, as conditioned and limited herein, to be in harmony with the purposes and intent of the By-Law, to comply with all applicable By-Law requirements, and to not increase the existing non-conforming structure nor to be more detrimental to the neighborhood than the existing non-conforming structure.

THEREFORE, the Board voted 5-0 to GRANT: (1) the requested Major Project Site Plan Special Permit Amendment under Section 7.4 of the Needham Zoning By-Law and Section 4.2 of Major Project Site Plan Special Permit No. 2007-10, dated December 4, 2012; and (2) the requested Special Permit under Section 1.4.6 of the By-Law for the structural alteration, enlargement and/or reconstruction of a non-conforming structure, subject to the following plan modifications, conditions and limitations.

PLAN MODIFICATIONS

2.0 Prior to the issuance of a building permit or the start of any construction on the site, 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 nor shall he permit any construction

activity on the site to begin on the site until and unless he finds that the Plan is revised to include the following additional, corrected, or modified information as set forth below. 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 nine copies of the final Plans as approved for construction by the Building Inspector to the Board prior to the issuance of a Building Permit.

The Plan shall be modified as follows and shall be submitted to the Board for approval and endorsement, as set forth below: No plan modifications are required.

CONDITIONS

- 3.0 The following conditions of this approval shall be strictly adhered to. Failure to adhere to these conditions or to comply with all applicable laws and permit conditions shall give the Board the rights and remedies set forth in Section 3.12 hereof.
- 3.1 The temporary addition, landscape areas, and other site features shall be constructed in accordance with the Plan. Any other changes, revisions or modifications to the Plan shall require approval by the Board, unless otherwise stated in this Decision.
- 3.2 The proposed temporary addition and other exterior improvements shall contain the dimensions and shall be located on that portion of the locus as shown on the Plan, as modified by this Decision, and in accordance with the applicable dimensional requirements of the By-Law.
- 3.3 This permit is issued for the continued approval of the temporary removal of the existing canopy and construction of a temporary covered vestibule between the building entrance and the temporary refrigeration unit to provide a secure, enclosed area clearly separate from public space as further described in Sections 1.3 and 1.4 of this Decision. Additionally, this permit is issued for a temporary chain link fencing with fabric mesh screen to add security, and to partially block the view of the concrete faced fencing adjacent to it. Lastly, the whole assembly as noted above shall be removed, the canopy shall be restored to its current location, and the old emergency department entrance and driveway restored to its current condition by November 15, 2020, or sixty (60) days after the end of the State of Emergency, whichever is later. An as-built plan showing the restored condition shall be submitted to the Board for review and approval. The temporary structure and any other associated improvements shall be removed from the site and the property shall be returned to its current condition by November 15, 2020, or sixty (60) days after the end of the State of Emergency, whichever is later, unless the Board, at the request of the Applicant, determines that the delay beyond November 15, 2020 or 60 days after the State of Emergency, whichever is later, is for good cause.
- 3.4 The following requirements of the Board of Health shall be met: (1) The Petitioner shall maintain restricted and tight security access to the refrigerated unit; (2) the refrigerated unit shall be monitored (daily manual temperature checks/remote sensor) to ensure correct cold-holding temperature ranges are being maintained; (3) the refrigerated unit shall be vented properly and shall be provided with proper condensate drainage (if applicable) per equipment requirements, to ensure the unit can function properly and remain in good repair in order to maintain proper temperatures; (4) the refrigerated unit shall be hooked up to a back-up generator; (5) the refrigerated unit/generator noise produced shall be minimal and shall not cause a public health nuisance concern to abutting neighbors.

- 3.5 An updated Environmental Sound Study for the refrigerated unit/generator and associated equipment shall be provided. The Planning Board has conditioned the requested amendment on the Petitioner providing an updated Environmental Sound Study which demonstrates that the projected sound level increase from the refrigerated unit/generator and associated equipment will comply with applicable sound regulations. The referenced sound study shall be submitted to the Planning Board for its review and approval within 45 days of the issuance of the subject permit.
- 3.6 To improve the appearance of the temporary vestibule for the time being, the Petitioner shall replace the white vinyl clapboard siding on the sides of the vestibule, which had been partially removed during the removal of the temporary pharmacy. The Petitioner shall also extend that white clapboard siding so that it covers the Lincoln Street face of the vestibule. The above noted improvement shall be completed with 45 days of the issuance of the subject permit.
- 3.7 The Petitioner shall receive the approval of the Design Review Board of the subject modification within 45 days of the issuance of the subject permit.
- 3.8 Hospital staffing shall not change as a result of the temporary structure.
- 3.9 All access to the refrigerated unit shall be on foot from the Hospital building, through a building egress door located a few feet away from one end of the refrigerated unit. There shall be no access to the refrigerated unit from Lincoln Street. No deliveries shall be done to the addition on Lincoln Street; all deliveries shall be done through the interior of the hospital. If the Petitioner however, were to install and utilize a temporary unit for diagnostic or other purposes in this location, all staff and patient access and any deliveries to such a temporary unit would be from the Hospital building through the vestibule, and not from Lincoln Street.
- 3.10 In addition to the provisions of this approval, the Petitioner must comply with all requirements of all state, federal, and local boards, commissions or other agencies, including, but not limited to, the Board of Selectmen, Building Inspector, Fire Department, Department of Public Works, Conservation Commission, Police Department, and Board of Health, pertaining to the Project.
- 3.11 The Petitioner, by accepting this permit decision, warrants that the Petitioner has included all relevant documentation, reports, and information available to the Petitioner in the application submitted, that this information is true and valid to the best of the Petitioner's knowledge.
- 3.12 Except as otherwise provided in this Decision, violation of any of the conditions of this Decision shall be grounds for revocation of any building permit or certificate of occupancy giving rise to the alleged violation: In the case of violation of any conditions of this Decision, the Town will notify the owner of such violation and give the owner reasonable time, not to exceed thirty (30) days, to cure the violation. If, at the end of said 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 Application. 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 with respect to the Project on May 19, 2021 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 March 19, 2021. The Board herein reserves its rights and powers to grant or deny such extension without a public hearing.²
- 4.7 This Decision shall be recorded at the Norfolk District Registry of Deeds. This Special Permit 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 of Deeds and until the Petitioner has delivered a certified copy of the recorded document to the Board.

The provisions of this Special Permit 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 of the Plan, as modified by this decision, 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 General Laws, Chapter 40A, Section 17, within twenty (20) days after filing of this decision with the Needham Town Clerk.

Needham Planning Board Decision – Beth Israel Deaconess Hospital-Needham, Inc. May 20, 2020

² Pursuant to Section 17 of the Municipal Relief legislation (Chapter 53 of the Acts of 2020), expiration dates and deadlines for meeting permit conditions in land use permits, including the subject March 19, 2020 Amendment to Decision and the noted Building Permit, are tolled during the state of emergency to respond to COVID-19 declared

by the Governor on March 10, 2020 (the "State of Emergency").

Witness our hands this 20th day of May, 2020		
NEEDHAM PLANNING BOARD		
Martin Jacobs Paul S. Alpert, Chairperson		
Jeanne S. McKnight, Vice-Chairperson		
Paul S. Alpert		
Bruce Eisenhut		
Ted Owens		
Copy sent to:		
Petitioner-Certified Mail # Design Review Board Building Inspector Conservation Commission Attorney Elizabeth H. Gerlach	Board of Selectmen Engineering Fire Department Police Department	Board of Health Town Clerk Director, PWD Parties in Interest

From: <u>Lee Newman</u>
To: <u>Alexandra Clee</u>

Subject: Fwd: Hospital Comments on Draft Decision on Application for Minor Modification & Extension of Temporary

Pharmacy Amendment to Decision

Date: Monday, May 18, 2020 4:03:35 PM

Attachments: Decision Amendment (BIDHN revs 5.18.20).docx

Please add this email and redlined document to the agenda package.

Thanks.

Lee

Sent from my Verizon, Samsung Galaxy smartphone

From: Gerlach, Elizabeth (BILH - Legal) < Elizabeth. Gerlach@bilh.org>

Sent: Monday, May 18, 2020 3:54:38 PM

To: Lee Newman <LNewman@needhamma.gov>

Cc: Fogarty, John (BIDMC - Needham) < jmfogart@bidneedham.org>; Hoffmann, Nancy (BIDN -

Administration) < nhoffman@bidneedham.org>

Subject: Hospital Comments on Draft Decision on Application for Minor Modification & Extension of

Temporary Pharmacy Amendment to Decision

Hello Lee,

Thank you for providing me with the draft Decision and the opportunity for the Hospital to comment.

Attached is a redline of the Draft Decision you sent me on Friday afternoon, marked to show edits being requested by the Hospital.

I have included some brief marginal explanatory notes in the Hospital's revised redlined Draft Decision. In addition I would like to share the following comments describing the rationale for the principal substantive changes we are requesting:

Sound Study Requirement: As you will see in Notes 3 and Note 6 flagging our edits to Sections 1.9 and 3.5 of the Draft Decision, the Hospital respectfully requests that the requirement of a sound study of the temporary refrigerated unit be deleted. The installation of this unit, or any substitute unit, will be temporary and solely to meet a unique and sensitive need created by this unprecedented public health emergency. We note that when the Hospital obtained the refrigerated unit a few weeks ago such units were in great demand, and we had to commit to one without being able to first study its sound parameters. If the Hospital removes the current refrigerated unit but needs at a later date to reinstall such a unit due to another surge of COVID-19 cases, it can be assumed that once again there will be increased demand and a need to act quickly. A sound study is useful when it can allow a proponent to alter a design or select alternative equipment. However, given the circumstances here involving a temporary, critical emergency public health need and limited alternatives, a sound study will be of limited utility and we ask that the Hospital be relieved of the time and expense of conducting one.

We note that based on the size and type of cooling equipment associated with the refrigerated unit we believe that its cooling system can be expected to generate less sound than the HVAC equipment associated with the Temporary Pharmacy that was permitted by the 2019 Amendment to Decision. The sound emissions associated with the Temporary Pharmacy were found to be compliant with applicable sound regulations by the Environmental Sound Study referenced by Exhibit 5. We are trying to obtain manufacturer's specifications for the temporary refrigerated unit to corroborate this expectation and we will share any additional information we are able to obtain by the meeting with the Planning Board.

We are mindful of the noise concerns of our neighbors, and we will address noise issues if they do arise. The Draft Decision provides a condition in Section 3.4 that the Hospital will be required to ensure that the refrigerated unit noise produced would be minimal and not cause a public health nuisance concern to abutting neighbors, as was requested by the Public Health Department in the memorandum from Tara Gurge dated 5/13/2020. We concur with this condition.

Vent and Condensate Drainage System Requirement: Section 3.4(3) of the proposed Draft Decision provides "the refrigerated unit shall be vented properly and shall be provided with proper condensate drainage (if applicable) per equipment requirements, to ensure the unit can function properly and remain in good repair in order to maintain proper temperatures." As discussed in Note 4 in our attached redline, we want to call to your attention that according to Michael Kelly, Director of Facilities for the Hospital, the refrigerated unit is installed and operating to manufacturer specifications and no vent system or condensate drainage system are provided or needed per the equipment requirements. The refrigerated unit has an external mechanical cabinet that contains the condensing unit which does not require a vent system. Condensate from the refrigerated unit drips to the ground as is common with outdoor cooling units. Accordingly, the Hospital asks that this language be deleted from Section 3.4(3) to avoid confusion.

<u>Back-up Generator Requirement.</u> Section 3.4(4) of the Draft Decision provides that "the refrigerated unit shall be hooked up to a back-up generator". A separate back-up generator for the refrigerated unit will not be necessary, however, since in the event of a power outage the Hospital has the ability to connect the refrigerated unit power supply into the Hospital's emergency power system within the cold-holding period for the refrigerated unit. Accordingly, the Hospital respectfully requests the deletion of the back-up generator requirement, and the substitution of a requirement that we tie the refrigerated unit into the Hospital's emergency power system should the need arise. We note that eliminating the back-up generator requirement will also have the benefit of eliminating an added noise source in connection with the temporary refrigerated unit.

We recognize that the three requirements discussed above were added to the Draft Decision in response to comments from the Public Health Department. The Hospital will be reaching out to Tara Gurge to discuss these issues with her as well in advance of the Planning Board meeting.

<u>Design Review Board Requirement.</u> As discussed in Note 7 in our attached redline, the Hospital requests the deletion of the DRB review requirement for this minor modification. We note that the DRB reviewed and approved the temporary pharmacy and associated improvements permitted by the 2019 Amendment to Decision, including the vestibule that remains. This minor modification is

for the temporary installation of a manufactured unit for an emergency purpose. The only new design element for DRB review would be the extension of the white clapboard material used on the sides of the existing vestibule to the front face of the vestibule. The Hospital respectfully suggests that the time, effort and expense that would be expended going through the DRB review process is not warranted given the very minor nature of the modification and the unique circumstances.

In closing, we ask that you please send the attached red-line of the Draft Decision and this email to the Planning Board members so they have an opportunity to review the Hospital's comments prior to the Planning Board meeting.

Lee, I would welcome the opportunity to discuss the issues addressed in this transmittal with you once you have had a chance to review these materials. Can you let me know when we could discuss this by phone? Tomorrow morning I will be available with the exception of 9:30 to 10:30 am.

Thank you for your consideration.

Best regards, Betsy

Elizabeth H. Gerlach

Senior Counsel and
Director of Real Estate Development & Land Use Planning
Beth Israel Lahey Health, Inc.
P: (617) 667-1886 | F: (617) 667-1736
Office of the General Counsel
109 Brookline Avenue, Suite 300, Boston, MA 02215
Elizabeth.Gerlach@bilh.org



immediately notify the sender. Thank you.

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AMENDMENT TO DECISION May 19, 2020 Application No. 2007-10

MAJOR PROJECT SITE PLAN SPECIAL PERMIT Beth Israel Deaconess Hospital Needham, Inc. 148 Chestnut Street, Needham, MA

(This Amendment To Decision amends Amendment to Decision dated March 5, 2019, itself an Amendment to Original Decision dated November 13, 2007, previously revised July 28, 2009, July 12, 2011, September 20, 2011, December 4, 2012, October 24, 2017 and March 5, 2019)

DECISION of the Planning Board (hereinafter referred to as the "Board") on the petition of Beth Israel Deaconess Hospital-Needham, Inc. ("BIDN" or the "Hospital") 148 Chestnut Street, Needham, MA, 02492, (the "Petitioner") for property located at 148 Chestnut Street, Needham, MA, 02492 (the "Property"). Said property is shown on Needham Town Assessors Plan No. 47 as Parcel No. 55, containing approximately 193,354 square feet in total.

This decision is in response to an application ("Application") submitted to the Board on May 4, 2020, by the Petitioner for: (1) a Major Project Site Plan Special Permit Amendment under Section 7.4 of the Needham Zoning By-Law (the "By-Law") and Sections 3.3 and 4.2 of Major Project Site Plan Special Permit No. 2007-10, Amendment to Decision dated March 5, 2019 December 4, 2012(the "2019 Amendment to Decision; and (2) a Special Permit under Section 1.4.6 of the By-Law for the structural alteration, enlargement and/or reconstruction of a non-conforming structure.

The requested Major Project Site Plan Special Permit, would, if granted, permit the Petitioner to modify the 2019 Amendment toof Decision (which permitted the construction of a temporary covered vestibule and installation of a temporary compounding pharmacy structure and associated improvements) to allow the installation of a temporary refrigerated unit (or an alternate temporary unit if needed), adjacent to the existing temporary vestibule, to be used for COVID-19 related Hospital uses, and the extension of the time for performance set forth in Section 3.3 of the 2019 Amendment to Decision for removal of all temporary improvements (including the refrigerated unit, or any alternate unit, and the vestibule) and restoration of the property to its prior condition until November 15, 2020, or sixty (60) days after the end of the Governor's declared state of emergency, whichever is later.

The changes requested are deemed minor in nature and extent and do not require a public notice or a public hearing. Testimony and documentary evidence were presented to the Board on Wednesday, Tuesday, May 2019, 2020 via remote meeting using Zoom ID 826-5899-3198. Board members Martin Jacobs, Jeanne S. McKnight, Paul S. Alpert, Bruce Eisenhut, and Ted Owens were present throughout the proceedings. The record of the proceedings and the submissions upon which this decision is based may be referred to in the office of the Town Clerk or the office of the Board.

Submitted for the Board's deliberation prior to the close of the public <u>meeting hearing</u> were the following exhibits:

Commented [BG1]: NOTE 1: The several edits made to the introductory sections are for clarity and consistency with the fact that the May 4 Hospital Application is for minor modification and extension of the 2019 Amendment to Decision, for which no public is being required.

Additional minor edits are made throughout this draft Decision to clarify references to the March 5, 2019 Amendment to Decision.

27.Decision Amendment (BIDHN revs 5.18.20)

Field Code Changed

- Exhibit 1 Properly executed Application for Further Site Plan Review completed by the Petitioner, with Attachment A, dated May 4, 2020 (the "Application").
- Exhibit 2 Letter to Planning Board Members from Attorney Elizabeth H. Gerlach, Senior Counsel and Director of Real Estate Development & Land Use Planning, Beth Israel Lahey Health, dated May 4, 2020.
- Exhibit 3 Plan entitled "As-Built Plan, Beth Israel Deaconess Hospital Needham, Inc.," prepared by Feldman Land Surveyors, 112 Shawmut Avenue, Boston, MA 02118, dated September 6, 2006, revised June 26, 2014 and July 11, 2014. [Submitted by Applicant as part of Application for 2019 Amendment to Decision.]
- Exhibit 4 Plan entitled "Plot Plan, Beth Israel Deaconess Hospital Needham, Inc.," prepared by Feldman Land Surveyors, 112 Shawmut Avenue, Boston, MA 02118, dated December 21, 2018. [Submitted by Applicant as part of Application for 2019 Amendment to Decision.]
- Exhibit 5 Memorandum directed to Jerome Andaya, from Aaron M. Farbo, Cavanaugh Tocci, dated February 15, 2019, received February 25, 2019, regarding Environmental Sound Study. [Submitted by Applicant as part of Application for 2019 Amendment to Decision.]
- Exhibit 6 Interdepartmental Communications (IDC) to the Board from Dennis Condon, Chief of the Needham Fire Department, dated May 5, 2020; IDC to the Board from Thomas Ryder, Assistant Town Engineer, the Needham Department of Public Works, dated May xx, 2020; IDC to the Board from Lieutenant John H. Kraemer, the Needham Police Department, dated May xx, 2020; and IDC to the Board from Tara Gurge, Assistant Public Health Director, dated May 15, 2020.

Exhibits 1, 2, 3 and 4 are hereinafter collectively referred to as the "Plan".

FINDINGS AND CONCLUSIONS

- 1.0 Based upon its review of the exhibits and the record of the proceedings, the Board found and concluded that:
- 1.1 The subject property is located in the Medical Overlay District at 148 Chestnut Street, Needham, MA, 02492, owned by Beth Israel Deaconess Hospital-Needham, Inc. Said property is shown on Needham Town Assessors Plan No. 47 as Parcel 55, containing approximately 193,354 square feet in total
- 1.2 The subject property is currently occupied by the Hospital, and is identified as 148 Chestnut Street, Needham, MA. The Hospital has been operating at 148 Chestnut Street for over 100 years. The Town of Needham operated the Hospital for many years until its sale to the private sector in 1994. The last expansion to the Hospital was constructed pursuant to Amendment to Site Plan Special Permit No. 2007-10, dated October 24, 2017.
- 1.3 The Amendment to Decision dated March 5, 2019 allowed the construction of a temporary covered vestibule and installation of a temporary compounding pharmacy structure and associated improvements. Section 3.3 of said 2019 Amendment to Decision provides that the Hospital is obligated to remove the temporary compounding pharmacy, vestibule and other associated improvements and restore the property to its prior condition within one year of the issuance of the building permit for the permitted improvements, unless the Planning Board at the request of the Applicant determines the delay beyond one year is for good cause. Building Permit 120190306 was

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issued on March 28, 2019 to install the temporary pharmacy improvements. At present, the temporary pharmacy structure has been removed and the temporary vestibule remains on site.¹

1.4 The Petitioner requests the <u>2019</u> Amendment <u>toof</u> Decision <u>dated March 5, 2019</u> be modified to allow the installation of a temporary unit/structure, adjacent to the existing temporary vestibule, to be used for COVID-19 related Hospital uses, as further described below.

Out of caution and concern for the citizens of Needham and Hospital patients and families, The Petitioner was able to secure a refrigerated unit to be used as a temporary morgue during the COVID – 19 crises. The refrigerated unit, which the Petitioner hopes to use not at all or only rarely, has been located adjacent to the temporary vestibule that was constructed to serve the temporary Cancer Center Pharmacy pursuant to by the 2019 Amendment to Decision. This location was chosen since the electrical connection required to power the unit is located in the temporary vestibule, and access to the refrigerated unit is concealed from street view.

All access to this refrigerated unit will be on foot from the Hospital building, through a building egress door located a few feet away from one end of the refrigerated unit. There will be no access to the refrigerated unit from Lincoln Street. The refrigerated unit is shown in the photograph attached to the application as Attachment A, and described in Exhibit 1. The unit is 8 feet wide, 8 feet 6 inches high, and 19 feet 10 inches long at its base, with an above-grade mechanical (A/C) cabinet that extends 2 feet 1 inch beyond the end of the unit closest to Lincoln Street. The bottom of the mechanical cabinet is approximately 4 feet 11 inches above grade and the cabinet dimensions are 2 feet 1 inch long, by 3 feet wide, by 2 feet 6 inches high. The access door to the refrigerated unit is at the end of the unit closest to the Hospital building. The base of the temporary refrigerated unit is set back approximately 7 feet 6 inches from the Lincoln Street property line, and the mechanical cabinet at its closest point is approximately 5 feet 5 inches from the property line.

To partially block the view of the refrigerated unit, temporary chain link fencing with fabric mesh screening has been placed across the driveway adjacent to the existing concrete faced fencing. This temporary chain link fencing was moved to this location from the other side of the semi-circular driveway where it had been installed previously pursuant to the 2019 Amendment to Decision in order to partially screen the temporary pharmacy structure. As noted above, the temporary pharmacy structure has been removed from the Hospital property. The vestibule that connected the temporary pharmacy structure to the Building remains, however, and the side of the vestibule facing Lincoln Street is unattractive following the temporary pharmacy's removal. To improve the appearance of the temporary vestibule for the time being, the Petitioner intends to replace the white vinyl clapboard siding on the sides of the vestibule, which had been partially removed during the removal of the temporary pharmacy. The Petitioner also proposes to extend that white clapboard siding so that it covers the Lincoln Street face of the vestibule. This front face previously abutted the temporary pharmacy structure so it was not visible and did not need an exterior skin. It is now covered in a green colored watertight "zip system" and its appearance will be improved by installing the white clapboard material that was previously approved for the sides of the vestibule.

Due to the rapidly evolving crisis and increasing shortages of necessary equipment, including refrigerated mobile units, the Petitioner took steps to procure and install the refrigerated unit as

¹ Pursuant to Section 17 of the Municipal Relief legislation (Chapter 53 of the Acts of 2020), expiration dates and deadlines for meeting permit conditions in land use permits, including the March 5, 2019 Amendment to Decision and the noted Building Permit, are tolled during the state of emergency to respond to COVID-19 declared by the Governor on March 10, 2020 (the "State of Emergency").

soon as possible as part of its surge preparations during the past several weeks. At the time of installation, the Petitioner emailed Lincoln Street neighbors to let them know the Hospital was planning to maintain a temporary unit on the Lincoln Street side of the building until the pandemic subsides, as part of temporary changes to operations needed to respond to the pandemic.

The Petitioner is now seeking permission from the Planning Board for this refrigerated unit to be maintained by the Petitioner at this location up to the extended expiration date being requested to of the 2019 Amendment to Decision as described in Section 1.6 below.

1.5 The Petitioner is also requesting permission for the Hospital, up to the extended date being requested to of the Amendment to Decision as described in Section 1.6 below, to be given the flexibility to elect to remove the temporary refrigerated unit during any period when the Petitioner determines it is not needed, and to have the option to reinstall a temporary refrigerated unit of similar size in the same location during any period if and when the Petitioner determines there is again a need. This flexibility is needed since it is possible there could be more than one surge of COVID-19 cases during the pandemic.

In addition, the Petitioner seeks permission, if and when the Petitioner is not maintaining a temporary refrigerated unit on site during the public health emergency, to alternatively use the area adjacent to the temporary vestibule to install a single temporary unit to be devoted to other COVID-19 related purposes (for example, for a mobile CT scanner or other diagnostic purposes). Such alternative temporary unit would be no larger than the temporary Cancer Center pharmacy unit permitted by the 2019 Amendment to Decision. While the Petitioner does not currently foresee the need to temporarily replace (e.g., due to equipment failure) or expand our CT or other radiologic or other diagnostic procedure space, the Petitioner is seeking the flexibility to use this temporary unit location, and the electrical hook-ups and infrastructure of the temporary vestibule, to best support the Petitioner's response to COVID-19 as this public health emergency continues. If the Petitioner were to install and utilize a temporary unit for diagnostic or other purposes in this location, all staff and patient access and any deliveries to such a temporary unit would be from the Hospital building through the vestibule, and not from Lincoln Street.

1.6 Section 3.3 of the March 5, 2019 Amendment to Decision stated, in part: "The temporary compounding pharmacy and any other associated improvements shall be removed from the site and the property shall be returned to its current condition within one year of the issuance of a building permit, unless the Board, at the request of the Applicant, determines that the delay beyond one year is for good cause.

The Petitioner further requests that the deadline in Section 3.3 of the March 5, 2019 Amendment to Decision for removal of the temporary improvements (including any temporary unit/structure permitted pursuant to this Application and the vestibule) and the restoration of the property to its prior condition be extended until November 15, 2020, or sixty (60) days after the end of the State of Emergency, whichever is later.

1.7 As indicated in the October 24, 2017 Amendment Decision, the Property conforms to zoning requirements as to lot area and frontage. The temporary structure will comply with the following applicable dimensional and density requirements of the Medical District Overlay Zoning District side and rear setback, maximum building height, maximum lot coverage, floor area ratio, and open space.

The existing Hospital building is a legal, pre-existing, non-conforming structure because of the location of the existing canopy at the former Emergency Department entrance located on Lincoln Street. The minimum front setback on Lincoln Street is 30 feet. At its closest point, the pre-existing canopy and related support structures are currently-approximately 9.1 feet from the Lincoln Street property line. The Hospital structure is a legal, pre-existing, non-conforming structure, which has been recognized in prior applications and decisions. The base of the temporary refrigerated unit is set back approximately 7 feet 6 inches from the Lincoln Street property line, and the mechanical cabinet at its closest point is approximately 5 feet 5 inches from the property line.

- 1.8 Access to the temporary refrigeration unit is only proposed by foot from inside the Hospital through a building egress door located a few feet away from one end of the refrigerated unit. No access is proposed to be from the outside or from Lincoln Street.
- 1.9 As detailed in Exhibit 5 above, an Environmental Sound Study was provided for the temporary pharmacy which stated that the new HVAC equipment sound emissions associated with the temporary pharmacy would comply with all applicable regulations, including the MassDEP tonal definition. An updated Environmental Sound Study for the refrigerated unit/generator was not provided with this application. The Planning Board has conditioned the requested amendment on the Petitioner providing an updated Environmental Sound Study which demonstrates that the projected sound level increase from the refrigerated unit/generator and associated equipment will comply with applicable regulations.
- 1.940 The Board finds that all of its findings, conclusions, conditions and limitations contained in Major Project Site Plan Review Special Permit No. 2007-10, dated November 13, 2007, revised July 28, 2009, July 12, 2011, September 20, 2011, December 4, 2012, October 24, 2017 and March 5, 2019 shall continue in full force and effect, with the exception of any conditions contained in this Decision.
- 1.104 Under Section 7.4 of the By-Law, a Major Project Site Plan Review Special Permit Amendment may be granted in the Medical Overlay 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
- 1.112 Under Section 1.4.6 of the By-Law, a lawful pre-existing nonconforming building may be structurally altered only pursuant to a special permit issued by the Board pursuant to Section 7.5.2 provided that the Board determines such alteration would not be substantially more detrimental to the neighborhood than the existing non-conforming structure. On the basis of the above findings and criteria, the Board finds that the proposed alteration, as conditioned and limited herein, to be in harmony with the purposes and intent of the By-Law, to comply with all applicable By-Law requirements, and to not increase the existing non-conforming structure nor to be more detrimental to the neighborhood than the existing non-conforming structure.

THEREFORE, the Board voted 5-0 to GRANT: (1) the requested Major Project Site Plan Special Permit Amendment under Section 7.4 of the Needham Zoning By-Law and Sections 3.3 and 4.2 of Major Project Site Plan Special Permit No. 2007-10, <u>Amendment to Decision</u> dated <u>March 5, 2019 December 4, 2012</u>; and (2) the requested Special Permit under Section 1.4.6 of the By-Law for the structural alteration, enlargement and/or reconstruction of a non-conforming structure, subject to the following plan modifications, conditions and limitations

Commented [BG2]: NOTE 2: Edit made for consistency with Section 1.4 above.

Commented [BG3]: NOTE 3: The Hospital respectfully requests the deletion of this Section 1.9 finding and related condition set forth in Section 3.5 below. We ask that no sound study be required for the temporary refrigerated unit or alternate unit, which are proposed solely for installation on an emergency temporary basis to respond to the COVID-19 crisis. See additional comments supporting this request in the transmittal email being sent with this redlined Draft Decision.

PLAN MODIFICATIONS

2.0 Prior to the issuance of a building permit or the start of any construction on the site, 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 nor shall he permit any construction activity on the site to begin on the site until and unless he finds that the Plan is revised to include the following additional, corrected, or modified information as set forth below. 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 nine copies of the final Plans as approved for construction by the Building Inspector to the Board prior to the issuance of a Building Permit.

The Plan shall be modified as follows and shall be submitted to the Board for approval and endorsement, as set forth below: No plan modifications are required.

CONDITIONS

- 3.0 The following conditions of this approval shall be strictly adhered to. Failure to adhere to these conditions or to comply with all applicable laws and permit conditions shall give the Board the rights and remedies set forth in Section 3.12 hereof.
- 3.1 The temporary addition, landscape areas, and other site features shall be constructed in accordance with the Plan. Any other changes, revisions or modifications to the Plan shall require approval by the Board, unless otherwise stated in this Decision.
- 3.2 The proposed temporary addition and other exterior improvements shall contain the dimensions and shall be located on that portion of the locus as shown on the Plan, as modified by this Decision, and in accordance with the applicable dimensional requirements of the By-Law.
- 3.3 This permit is issued for the continued approval of the temporary removal of the existing canopy and construction of a temporary covered vestibule between the building entrance, and installation of the temporary refrigeration or alternate unit to provide a secure, enclosed area clearly separate from public space as further described in Sections 1.3,—and 1.4 and 1.5 of this Decision. Additionally, this permit is issued for a temporary chain link fencing with fabric mesh screen to add security, and to partially block the view of the concrete faced fencing adjacent to it. Lastly, the whole assembly as noted above shall be removed, the canopy shall be restored to its current location, and the old emergency department entrance and driveway restored to its current condition by November 15, 2020, or sixty (60) days after the end of the State of Emergency, whichever is later. An as-built plan showing the restored condition shall be submitted to the Board for review and approval. The temporary structure and any other associated improvements shall be removed from the site and the property shall be returned to its current condition by November 15, 2020, or sixty (60) days after the end of the State of Emergency, whichever is later, unless the Board, at the request of the Applicant, determines that the delay beyond one year is for good cause.
- 3.4 The following requirements of the Board of Health shall be met: (1) The Petitioner shall maintain restricted and tight security access to the refrigerated unit; (2) the refrigerated unit be monitored (daily manual temperature checks/remote sensor) to ensure correct cold-holding temperature ranges are being maintained; (3) the refrigerated unit shall be vented properly and shall be provided with proper condensate drainage (if applicable) per equipment requirements, to ensure the unit can

function properly and remain in good repair in order to maintain proper temperatures; (34) in the event of a power failure, if the refrigerated unit is then in use the Hospital will connect the refrigerated unit into the Hospital's emergency power supply system within the period the refrigerated unit can maintain appropriately cold temperatures during power loss shall be hooked up to a back up generator; (45) the refrigerated unit/generator noise produced shall be minimal and shall not cause a public health nuisance concern to abutting neighbors.

- 3.5 An updated Environmental Sound Study for the refrigerated unit/generator and associated equipment shall be provided. The Planning Board has conditioned the requested amendment on the Petitioner providing an updated Environmental Sound Study which demonstrates that the projected sound level increase from the refrigerated unit/generator and associated equipment will comply with applicable sound regulations. The referenced sound study shall be submitted to the Planning Board for its review and approval within 45 days of the issuance of the subject permit.
- 3.63.5 To improve the appearance of the temporary vestibule for the time being, the Petitioner shall replace the white vinyl clapboard siding on the sides of the vestibule, which had been partially removed during the removal of the temporary pharmacy. The Petitioner shall also extend that white clapboard siding so that it covers the Lincoln Street face of the vestibule. The above noted improvement shall be completed with 45 days of the issuance of the subject permit.
- 3.7 The Petitioner shall receive the approval of the Design Review Board of the subject modification within 45 days of the issuance of the subject permit.
- 3.8 Hospital staffing shall not change as a result of the temporary structure.
- 3.9 All access to the refrigerated unit shall be on foot from the Hospital building, through a building egress door located a few feet away from one end of the refrigerated unit. There shall be no access to the refrigerated unit from Lincoln Street. No deliveries shall be done to the addition on Lincoln Street; all deliveries shall be done through the interior of the hospital. If the Petitioner however, were to install and utilize a temporary unit for diagnostic or other purposes in this location, all staff and patient access and any deliveries to such a temporary unit would be from the Hospital building through the vestibule, and not from Lincoln Street.
- 3.10 In addition to the provisions of this approval, the Petitioner must comply with all requirements of all state, federal, and local boards, commissions or other agencies, including, but not limited to, the Board of Selectmen, Building Inspector, Fire Department, Department of Public Works, Conservation Commission, Police Department, and Board of Health, pertaining to the Project.
- 3.11 The Petitioner, by accepting this permit decision, warrants that the Petitioner has included all relevant documentation, reports, and information available to the Petitioner in the application submitted, that this information is true and valid to the best of the Petitioner's knowledge.
- 3.12 Except as otherwise provided in this Decision, violation of any of the conditions of this Decision shall be grounds for revocation of any building permit or certificate of occupancy giving rise to the alleged violation: In the case of violation of any conditions of this Decision, the Town will notify the owner of such violation and give the owner reasonable time, not to exceed thirty (30) days, to cure the violation. If, at the end of said 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

Commented [BG4]: NOTE 4: According to Michael Kelly, Director of Facilities for the Hospital, the refrigerated unit is installed and operating to manufacturer specifications and no vent system or condensate drainage system are provided or needed per the equipment requirements. The refrigerated unit has an external mechanical cabinet that contains the condensing unit which does not require a vent system. Condensate from the refrigerated unit drips to the ground as is common with outdoor cooling units. Accordingly, the Hospital asks that this subclause (3) be deleted to avoid confusion

Commented [BG5]: NOTE 5: In the event of a power outage, the Hospital has the ability to connect the refrigerated unit power supply into the Hospital's emergency power system within the cold-holding period for the refrigerated unit. Accordingly, the Hospital respectfully requests the deletion of the back-up generator requirement and the insertion of the suggested edits. See additional comments supporting this request in the transmittal email being sent with this redlined Draft Decision.

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Commented [BG6]: NOTE 6: Please see explanation for deletion in NOTE 3 above.

Commented [BG7]: NOTE 7: The Hospital requests the deletion of the DRB review requirement for this minor modification. We note that the DRB reviewed and approved the temporary pharmacy and associated improvements permitted by the 2019 Amendment to Decision, including the vestibule that remains. This minor modification is for the temporary installation of a manufactured unit for an emergency purpose. The only design element for DRB review would be the extension of the white clapboard material used on the sides of the vestibule to the front face of the vestibule. The Hospital respectfully suggests that the time, effort and expense that would be expended going through the DRB review process is not warranted given the minor nature of the modification and the unique circumstances.

Commented [BG8]: NOTE 8: With deletion of 3.5 and 3.7 of original Draft Decision, remaining subsections of Section 3 will need to be renumbered.

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 Application. 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 with respect to the Project on May 2019, 2021 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 MayMarch 2019, 2021. The Board herein reserves its rights and powers to grant or deny such extension without a public hearing.²
- 4.7 This Decision shall be recorded at the Norfolk District Registry of Deeds. This Special Permit 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 of Deeds and until the Petitioner has delivered a certified copy of the recorded document to the Board.

The provisions of this Special Permit 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 of the Plan, as modified by this decision, 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 General Laws, Chapter 40A, Section 17, within twenty (20) days after filing of this decision with the Needham Town Clerk.

Commented [BG9]: NOTE 9: This deletion is suggested as such an appeal period is inapplicable to a minor modification for which no public hearing was required.

Commented [BG10]: NOTE 10: We ask that the Planning Board accept an uncertified copy of the recorded document. We note it may be difficult to obtain a certified copy from the Registry of Deeds at the present time, and this requirement could cause an unnecessary delay.

Field Code Changed

² Pursuant to Section 17 of the Municipal Relief legislation (Chapter 53 of the Acts of 2020), expiration dates and deadlines for meeting permit conditions in land use permits, including the subject MayMarch 19 20, 2020 Amendment to Decision and the noted Building Permit, are tolled during the state of emergency to respond to COVID-19 declared by the Governor on March 10, 2020 (the "State of Emergency").

27.Decision Amendment (BIDHN revs	s 5.18.20)	
Witness our hands this 19th day of May, 20	020	
NEEDHAM PLANNING BOARD		
Martin Jacobs Paul S. Alpert, Chairperson		
Jeanne S. McKnight, Vice-Chairperson		
Paul S. Alpert		
Bruce Eisenhut		
Ted Owens		
Copy sent to:		
Petitioner-Certified Mail #	Board of Selectmen	Board of Health

Engineering
Fire Department
Police Department

Town Clerk

Director, PWD Parties in Interest

Design Review Board

Building Inspector Conservation Commission Attorney Elizabeth H. Gerlach Field Code Changed

Beth Israel Lahey Health Beth Israel Deaconess Needham

BY EMAIL

May 19, 2020

Needham Public Health Division 178 Rosemary Street Needham, MA 02494 Attention: Tara Gurge

Re:

Beth Israel Deaconess Hospital – Needham Response to Health Division Comments on Hospital Application to Planning Board for Minor Modification and Extension of Temporary Pharmacy Amendment to Special Permit Decision

Dear Ms. Gurge:

I am writing to share some information about the temporary refrigerated unit in response to the Needham Public Health Division's comments on the Hospital's pending minor modification application.

Each of the comments listed in your memo dated May 13, 2020 are addressed in order below:

- <u>Security:</u> We want to assure you that access to the refrigerated unit is strictly limited.
 The refrigerated unit is securely locked at all times. The key to the unit is secured in a hospital lock box with restricted passcode access. In addition, the perimeter of the Hospital is periodically checked by Hospital public safety personnel day and night.
- Temperature Monitoring: Appropriate cold temperatures are continuously maintained and are monitored daily. The refrigerated unit has a temperature gauge that is visible from outside the unit, and the temperature is checked Monday through Friday by Mike Kelly, the Director of Facilities. If the unit needs to be used Hospital personnel will monitor and log the temperature daily.
- Venting and Condensate Drainage: You asked that we ensure that the refrigerated unit is vented properly and has proper condensate drainage (if applicable) per equipment requirements, to ensure the unit can function properly and remain in good repair in order to maintain proper temperatures. The refrigerated unit is installed and is operating to manufacturer specifications, and no vent system or condensate drainage system are provided or needed per the equipment requirements. The refrigerated unit has an external mechanical cabinet that contains the condensing unit which does not require a vent system. There is a louver on the mechanical cabinet to allow the

equipment to be surrounded by outside air. Condensate from the refrigerated unit drips to the ground as is common with outdoor cooling units.

- Back-up Generator: You have requested that the refrigerated unit be hooked up to a back-up generator. However, we want you to know that in the event of a power outage the Hospital has the ability to connect the refrigerated unit power supply into the Hospital's emergency power system quickly, within the cold-holding period for the refrigerated unit. Accordingly, we do not think it should be necessary to bring in a separate back-up generator for this temporary unit. In lieu of requiring a back-up we are asking the Planning Board to substitute a requirement that the Hospital tie the refrigerated unit into the Hospital's emergency power system, which has ample capacity, should the need arise. Also, we note that if the back-up generator is not required, this will eliminate adding an extra noise source in connection with the temporary refrigerated unit. Given the location of the unit along Lincoln Street we think this factor is worthy of consideration.
- Sound: You have asked that the Hospital be required to ensure that the refrigerated unit noise produced would be minimal and not cause a public health nuisance concern to abutting neighbors. Based on the size and type of cooling equipment associated with the refrigerated unit we believe that its cooling system can be expected to generate less sound than the HVAC equipment associated with the Temporary Pharmacy that was permitted by the 2019 Amendment to Decision. We are mindful of the noise concerns of our neighbors, and we will address noise issues if they do arise.

Thank you for the Health Division's comments, and for this opportunity to respond. If you have any additional questions or concerns, please do not hesitate to contact me. I can be reached by email at nhoffman@bidneedham.org or by phone at (781) 453-3842.

Sincerely yours,

Nancy A. Hoffmann

Chief Financial and Support Services Officer

Cc: By Email

Timothy McDonald, Needham HHS Director
Lee Newman, Needham Planning Department Director (by email)
John Fogarty, President, Beth Israel Deaconess Hospital – Needham
Elizabeth H. Gerlach, Senior Counsel, Beth Israel Lahey Health
Mike Kelly, Director of Facilities, Beth Israel Deaconess Hospital – Needham





MEMO

To: Lee Newman, Planning Department From: Tara Gurge, Public Health Division

Date: 5/20/2020

Re: Follow-up Comments on Planning Board Minor Modification Application - Beth Israel Deaconess

Hospital

This follow-up memo is in reference to the Public Health Division request for comments on the Planning Board's Minor Modification Application for Beth Israel Deaconess Hospital.

- We are in receipt of the follow-up letter from Nancy Hoffmann, Chief Financial and Support Services Officer at Beth Israel Deaconess Hospital, dated May 19, 2020. We are satisfied with the revisions the hospital has proposed to address our concerns that were stated in our previous comment Memo. We feel that our concerns will be addressed if these additional requirements are followed, as stated in their letter.

Please feel free to contact the Public Health Division office if you have any additional questions.

CC:

Frieze Cramer Rosen & Huber 1119

COUNSELLORS AT LAW

60 Walnut Street, Wellesley, Massachusetts 02481 781-943-4000 • FAX 781-943-4040

EVANS HUBER
781-943-4043
EH@128LAW.COM

May 8, 2019

Members of the Needham Planning Board

And

Lee Newman
Director of Planning and Community Development
Public Services Administration Building
500 Dedham Ave
Needham, MA 02492

Re: 100 West Street, Needham

Dear Planning Board Members and Ms. Newman:

This office represents LCB Senior Living, 3 Edgewater Drive, Suite 101, Norwood, MA 02062, the prospective purchaser of 100 West Street, Needham, MA 02494. ("LCB"). The property is a 4.298 acre parcel (187,219 SF) located at the corner of Highland Avenue and West Street previously occupied by Avery Crossing, a 60 unit assisted living/memory care facility, Avery Manor, a 142 bed skilled nursing facility, and medical offices comprising approximately 8,308 SF.

The entire building, and the great majority of the property, is located in the Avery Square Business District (ASB), with a portion of the property located in the Single Residence B Zoning District. The property is currently vacant and is improved by a three story brick building of approximately 186,000 SF, outdoor parking areas to the south and west of the building and an indoor parking area. The original Planning Board Decision authorizing the former uses was Site Plan Special Permit No. 93-4, dated October 12, 1993, and amended on February 8, 1994, February 25, 1995, May 6, 1996, August 20, 1996 and April 20, 2004.

LCB is proposing to redevelop the property to include an 83 unit Assisted Living and Alzheimer's/Memory Care facility and 71 Independent Living Apartments. The existing 3 story brick building will remain. The existing footprint of the building will not change and, in order to make the project financially feasible, a partial fourth story will be added to create 10 of the proposed 71 Independent Living Apartments. The parking lot to the south of the building will

FRIEZE CRAMER ROSEN & HUBERLLP

Needham Planning Board Members Lee Newman May 8, 2020 Page 2

remain unchanged except for selected new landscaping and the parking lot west of the building and adjacent to the railroad right of way will be modified slightly, including selected new landscaping.

The building is a legal, pre-existing non-conforming structure. Some aspects of the proposed redevelopment can be accomplished by special permit by the Planning Board, but other aspects of the proposed redevelopment will require zoning changes. After discussions with the Town Planner, the Chairman of the Planning Board, and the Building Commissioner, it was determined that the preferable course of action was to create an Avery Square Overlay District and to limit the boundaries of that district to the portion of the property that is located in the Avery Square Business District. The portion of the property lying in the adjacent Residential B District consists entirely of a portion of the south parking area, and landscaped areas. As noted above, no portion of the building is located in the residential district.

We have prepared two draft zoning articles, attached for your review. The first article creates the Avery Square Overlay District ("ASOD") and the second article is a map change. In an effort to draw the articles narrowly so as to minimize unintended consequences, the proposed zoning changes closely mirror what is actually intended to be constructed. The principal proposed zoning changes and additions are:

- 1) The maximum allowable height of a structure in the ASB is 35 feet. The proposed zoning change will increase the maximum allowable height of a structure in the ASOD to (a) 44 feet to the top of the fourth story, including mechanical systems, except that (b) the two elevator mechanical systems will have a maximum allowable height of 49 feet.
- 2) The maximum number of stories allowed in the ASB is 2 ½, and only two stories may be occupied. However, the current building is a 3-story legal, pre-existing non-conforming structure with occupancy on all three stories The proposed zoning change is to increase the maximum allowable number of stories in the ASOD to 4, with all four stories permitted to be occupied (note that a portion of the first level will continue to be an indoor parking area).
- 3) The proposed fourth story is limited so that any structures (including mechanicals) on the fourth story must be set back from the façade of the existing structure by 35 feet on the south, 15 feet on the east, 110 feet on the north (except for the northern-facing side of the building at the rear of the West Street parking area and closest to the MBTA right of way, which is proposed to be 0 feet), and 0 feet on the west. Please note that to the west of the building is a parking area, which is immediately adjacent to the railroad right of way, which in turn is adjacent to the Hillside Avenue Business District.
- 4) The proposed fourth story is also limited so that the total floor area of any fourth floor addition to the existing building (excluding mechanicals such as HVAC equipment) may not exceed thirty-five percent (35%) of the total roof area of the existing building.

FRIEZE CRAMER ROSEN & HUBERLIP

Needham Planning Board Members Lee Newman May 8, 2020 Page 3

- 5) The maximum allowable floor area ratio (FAR) in the ASB is 0.7, and the proposed maximum allowable FAR in the ASOD is 1.1. The area of the building devoted to parking garages is not included in FAR calculations, as is the case in some of the other zoning districts in Needham, such as the Medical, Needham Center, Lower Chestnut Street, and Garden Street Overlay Districts, and the Elder Services Zoning District.
- 6) The proposed parking requirement for Independent Living Apartments is 1 space per Apartment. For comparison purposes, the parking requirement for Independent Living Apartments in the Elder Services Zoning District is 0.5, and the parking requirement for the A-2 Zoning District (where North Hill is located) is 1.5. The proposed parking requirement for the Assisted Living and Alzheimer/Memory Loss units is the same as is already set forth in Section 5.1.2 of the Bylaw for nursing homes and residential care facilities; one space for every two beds, plus one space for every two employees on the largest shift.
- 7) Both Independent Living Apartments and Assisted Living and Alzheimer/Memory Loss Facilities are proposed to be allowed as a matter of right in the ASOD. We note that although the Planning Board sometimes prefers certain uses to be allowed by special permit instead of as a matter of right, we believe that in this very limited overlay district, designating these two uses to be allowable as a matter of right is warranted because (a) an assisted living/memory care facility operated in this building for almost 25 years; (b) Independent Living Apartments are in very short supply in Needham; (c) the property is close to the Senior Centerand the Needham Heights train stop; (d) many other nearby commercial businesses are within walking distance of the proposed development; and (e), the other restrictions set forth in the proposed zoning articles will ensure, to the maximum extent possible, that the project maintains and promotes the existing character of the neighborhood.
- 8) The proposed ASOD bylaw requires that ten percent (10%) of the Independent Living Apartments to be affordable units.

The proposed map change article defines the boundaries of the ASOD as matching the boundaries of the property, except that on the south, the boundary of the ASOD matches the boundary of the ASB established in 1992. Although this means that a small portion of the property (including, as noted above) a portion of the south parking area, will not be in the ASOD, but will continue to be located in the adjacent SRB district, we believe this may be preferable to creating an overlay district whose boundaries extend into the current, adjacent SRB district.

Our consultants have prepared a number of documents and plans to assist you in analyzing the proposed development. They include:

FRIEZE CRAMER ROSEN & HUBERLIP

Needham Planning Board Members Lee Newman May 8, 2020 Page 4

- Traffic Impact Study, prepared by McMahon Associates, 120 Water Street, Unit 1, Boston, MA 02109, dated April 2020
- 2. Fiscal Impact Analysis, prepared by Fougere Planning + Development, 253 Jennison Road, Milford, NH 03055, dated May 4, 2020;
- Existing Conditions and Proposed Conditions Site Plans, and Zoning and Parking Tables, prepared by Kelly Engineering Group, 0 Campanelli Drive, Braintree, MA 02184
- 4. Landscaping Plan, prepared by Hawk Design Inc., P.O. Box 1309, Sandwich, MA 02563
- 5. Floor plans, roof plan, elevation plans, photographs and renderings (including existing and proposed views of the property from various vantage points), prepared by The Architectural Team, Inc., 50 Commandants Way, Chelsea, MA 02150. With respect to these plans and renderings, please note:
 - a. the elevations and view renderings show the fourth floor units and screening of mechanicals as being built to the maximum height allowed by the proposed bylaw, although LCB expects that the fourth floor units and screening will be somewhat lower than the maximum allowable height;
 - the color of the exterior of the fourth floor units, and the color of the screening, has not yet been determined; and
 - c. the height and exact location of all mechanical systems on the roof has not been finalized, and as a result there may be minor adjustments to the location and height of the screening around those mechanical systems.

We look forward to meeting with you (via Zoom) on May 19, 2020. It is our hope that you will look favorably on this project and agree to sponsor the zoning changes at the Fall, 2020 Town Meeting, as was preliminarily discussed at our initial meeting with the Town Planner, Planning Board Chair and Building Inspector described above.

Sincerely,

Roy A. Cramer

Evans Huber

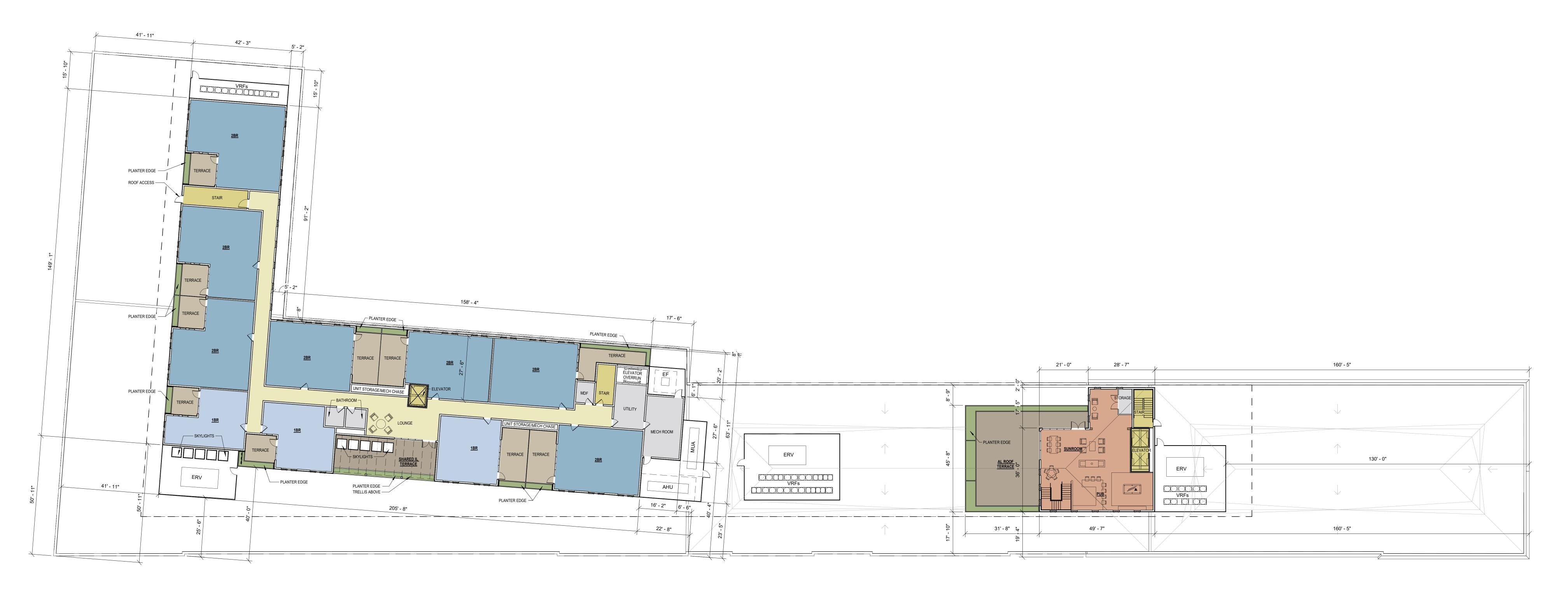






SQUARE FOOTAGE OF EXISTING ROOF	62,775 SF
SQUARE FOOTAGE OF PROPOSED IL PENTHOUSE & AL COMMON SPACE (INCLUDING TERRACES)	20,650 SF
PERCENT OF ROOF COVERED (INCLUDING TERRACES)	32.9%
SQUARE FOOTAGE OF PROPOSED IL PENTHOUSE & AL COMMON SPACE (EXCLUDING TERRACES)	15,900 SF
PERCENT OF ROOF COVERED (EXCLUDING TERRACES)	25.3%
SQUARE FOOTAGE OF PROPOSED MECHANICAL SPACE	3,850 SF
PERCENT OF ROOF COVERED (MECHANICAL SPACE)	6.1%
SQUARE FOOTAGE OF PROPOSED IL PENTHOUSE & AL COMMON SPACE (INCLUDING TERRACES & MECHANICAL)	24,500 SF
PERCENT OF ROOF COVERED (INCLUDING TERRACES & MECHANICAL)	39.0%

ERV - ENERGY RECOVERY VENTILATOR VRF - VARIABLE REFRIGERANT FLOW MUA - MAKE UP AIR AHU - AIR HANDLING UNIT EF - EXHAUST FAN

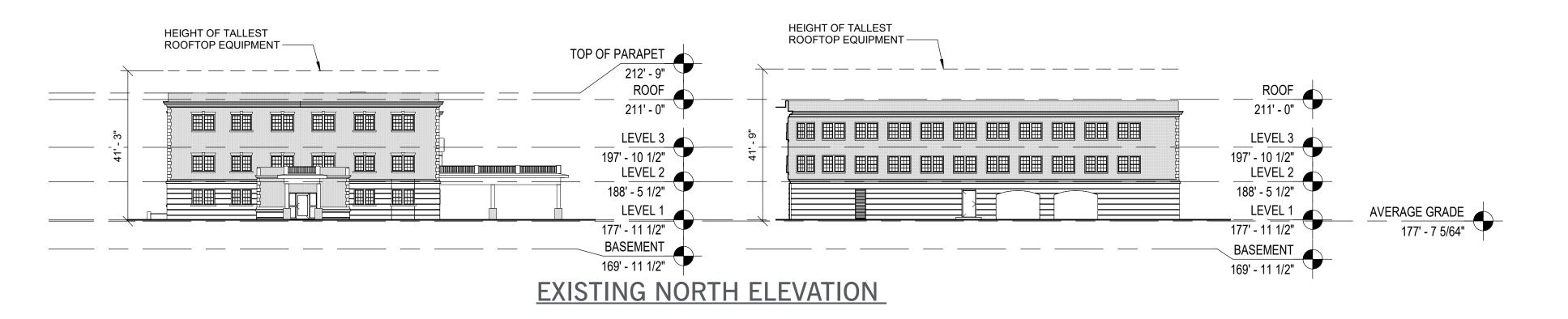


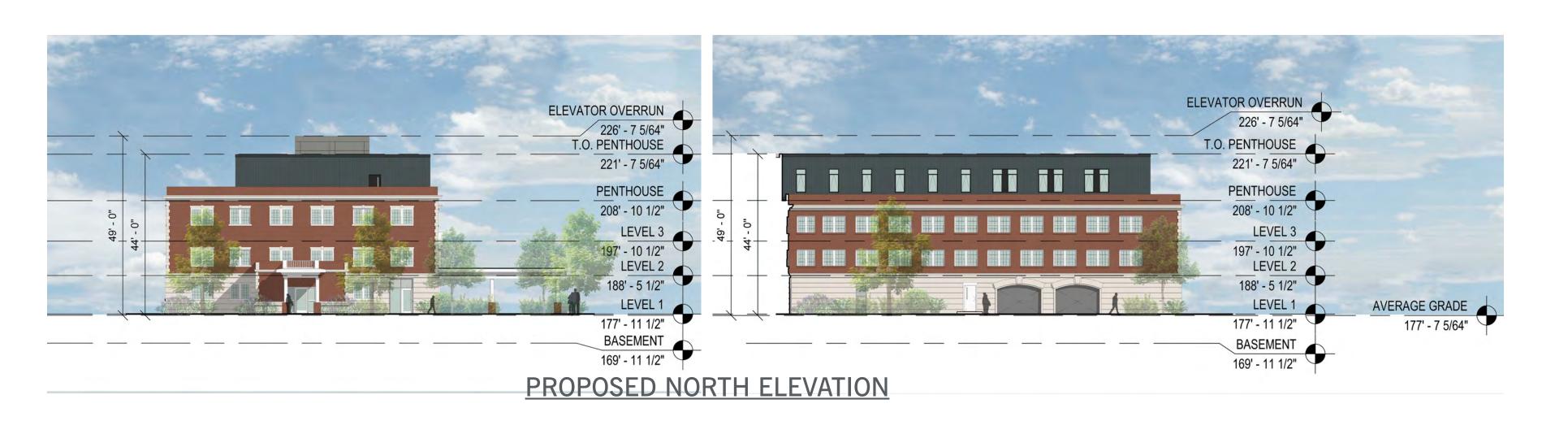
1/16" = 1'-0"





PROPOSED WEST ELEVATION







ELEVATOR OVERRIN 227-7564* 1. OPENHOUSE 221-7564* PENHOUSE 228-7017* LEVEL 3 1. OPENHOUSE 1.

PROPOSED EAST ELEVATION (HIGHLAND AVENUE)

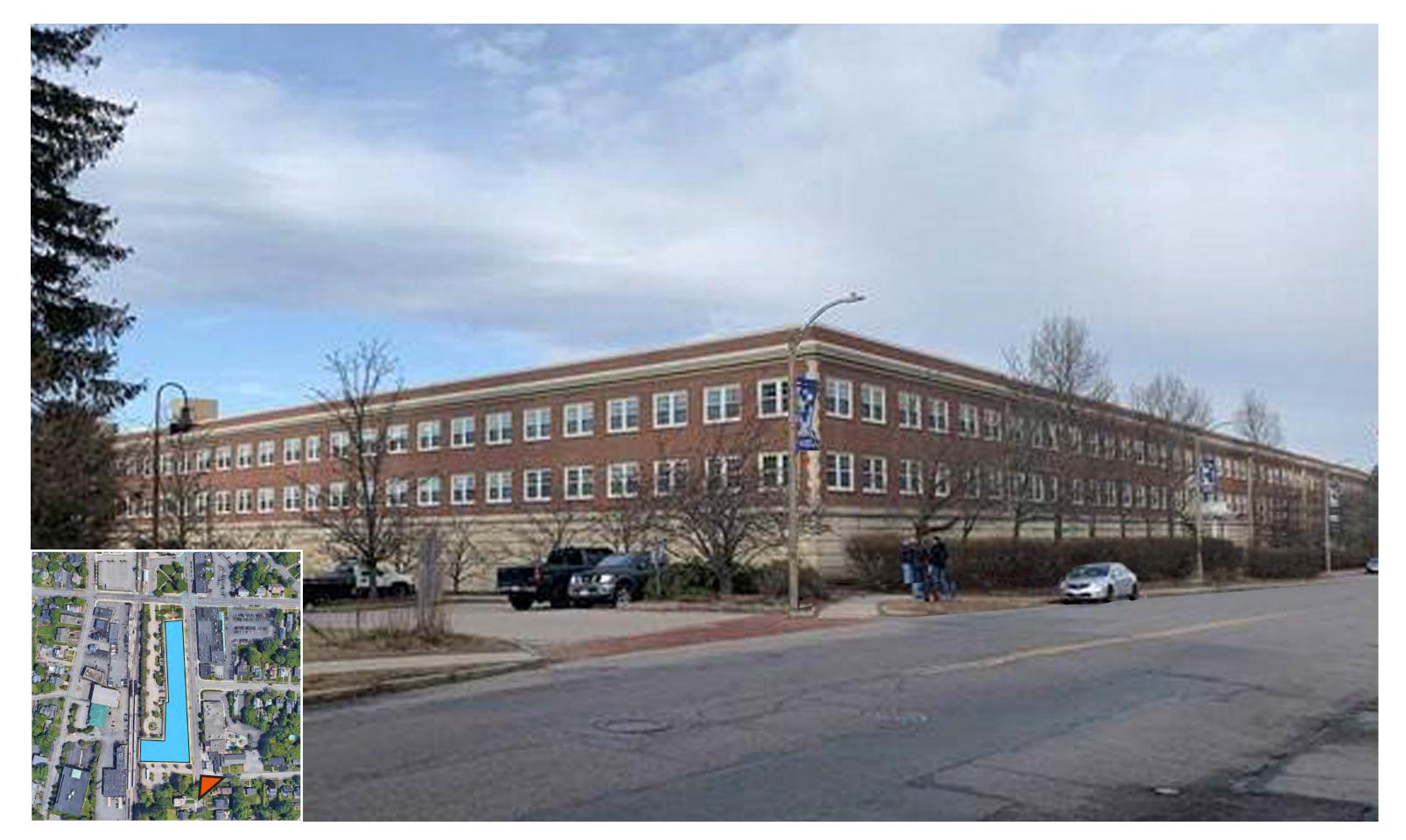




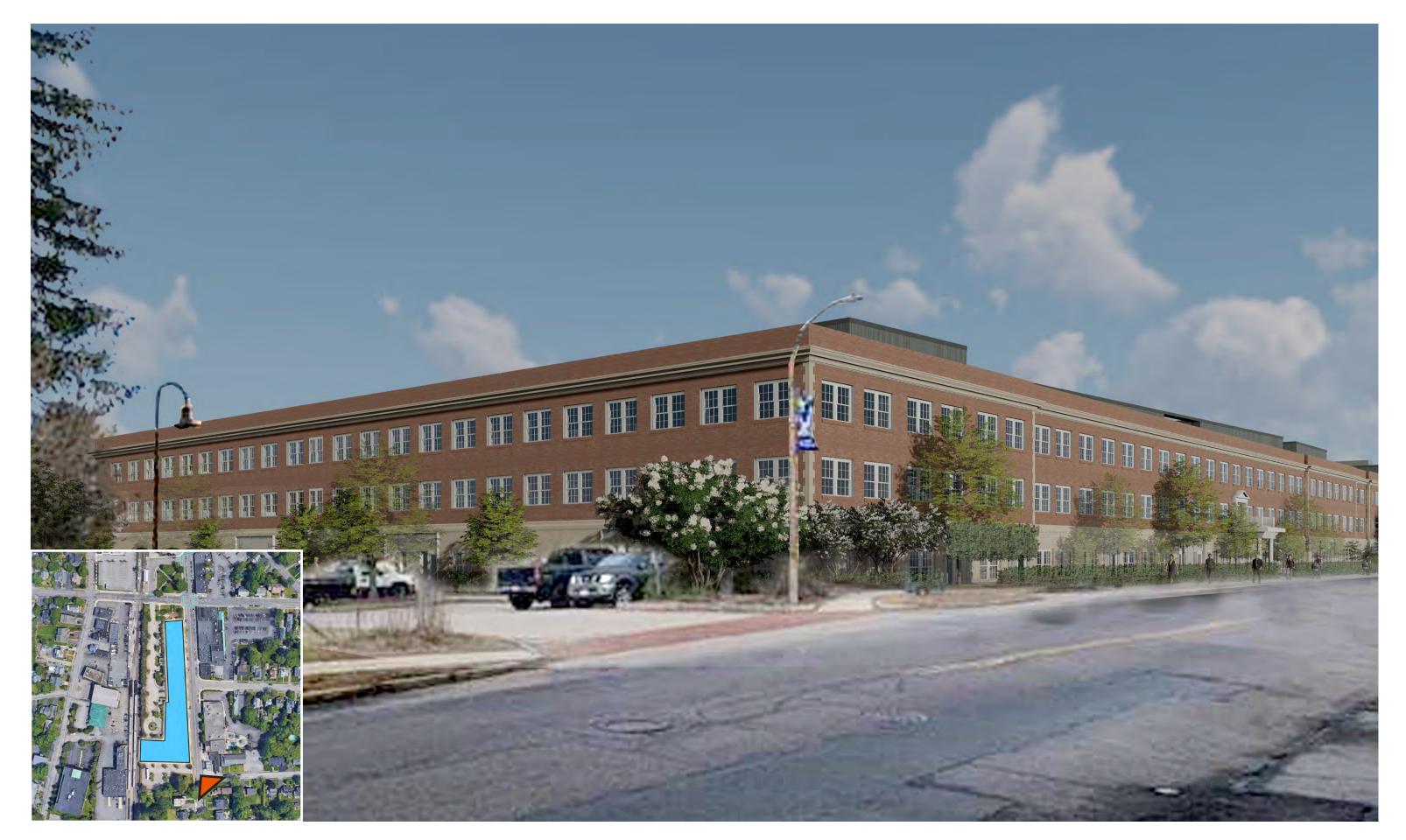
169' - 11 1/2"



























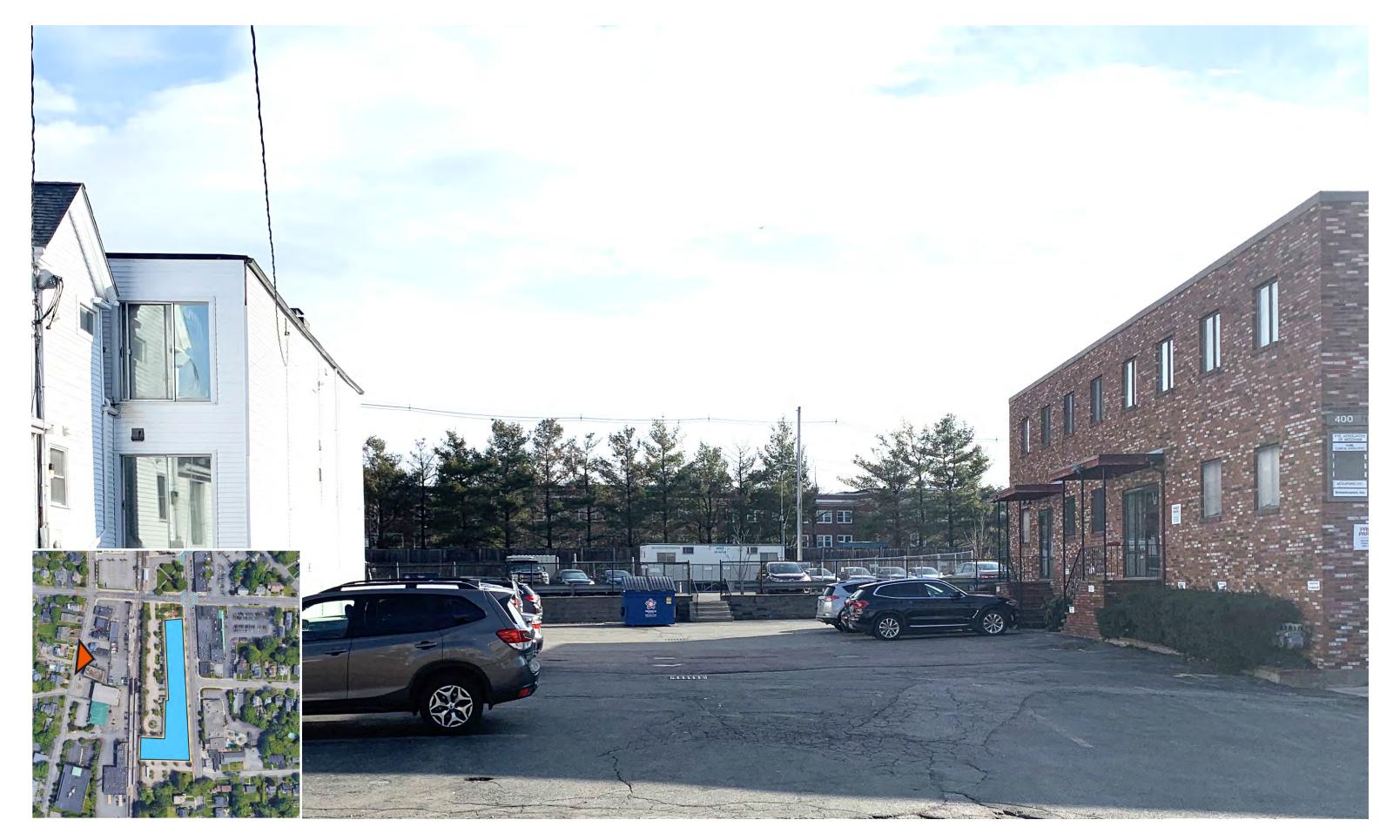




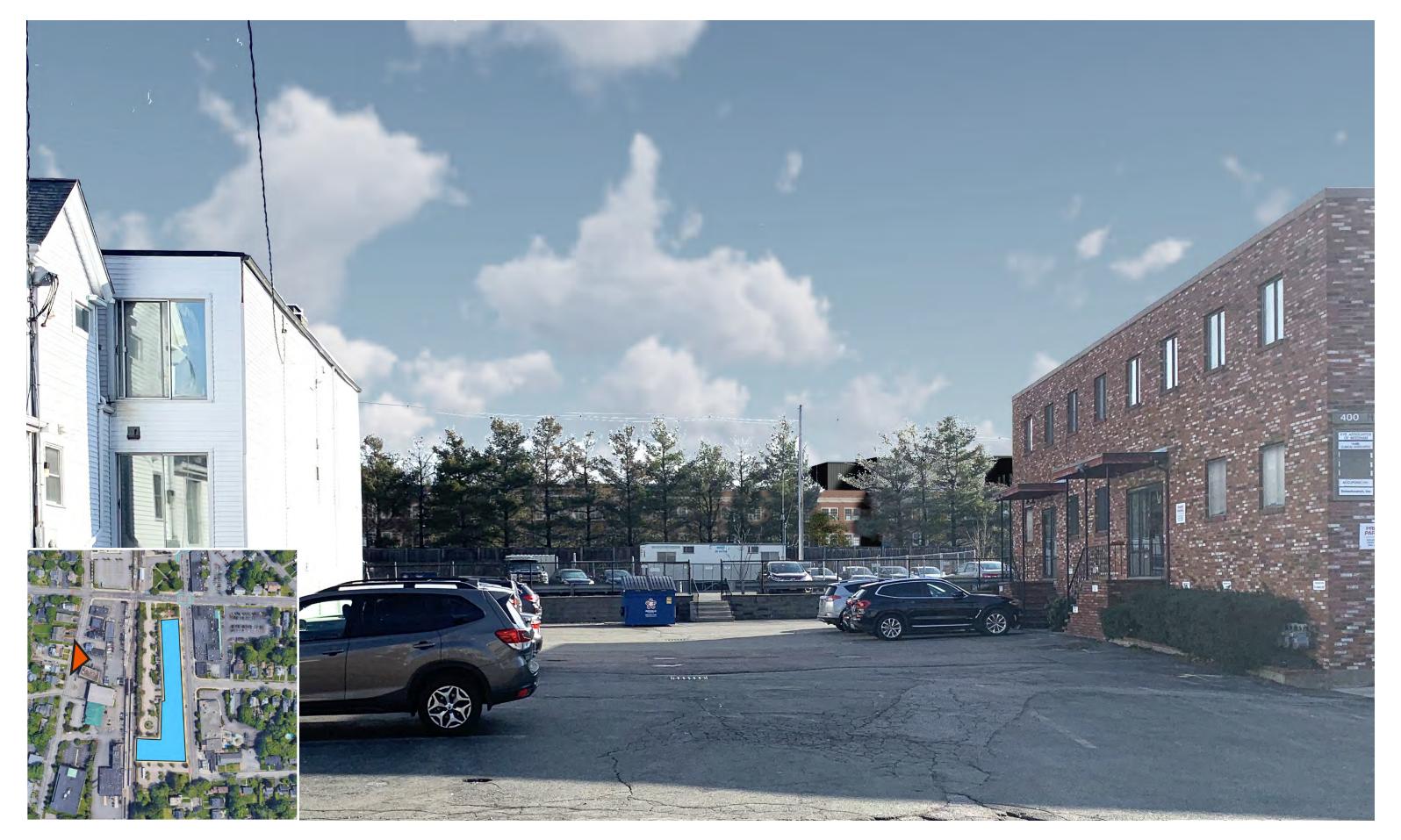




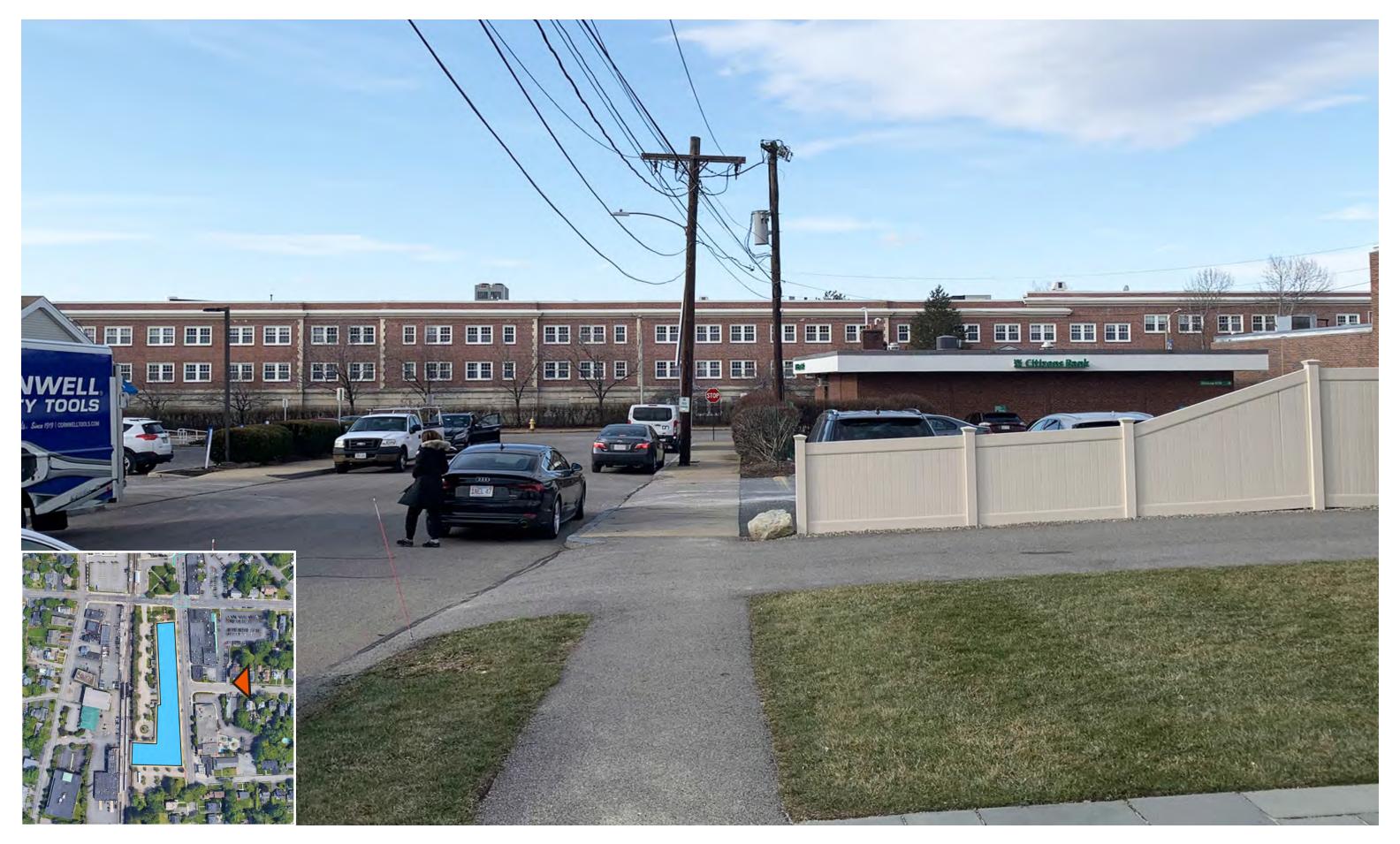
















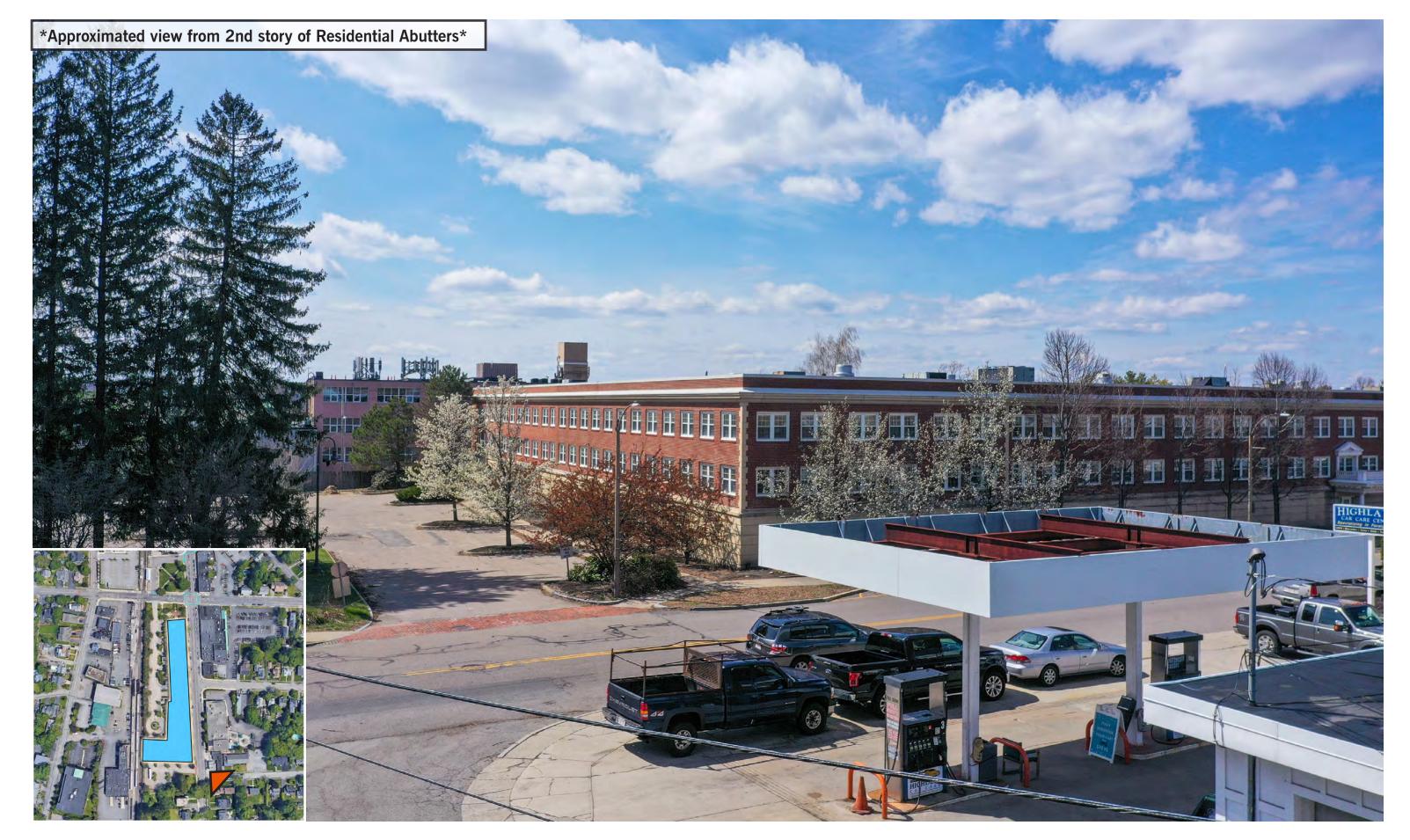




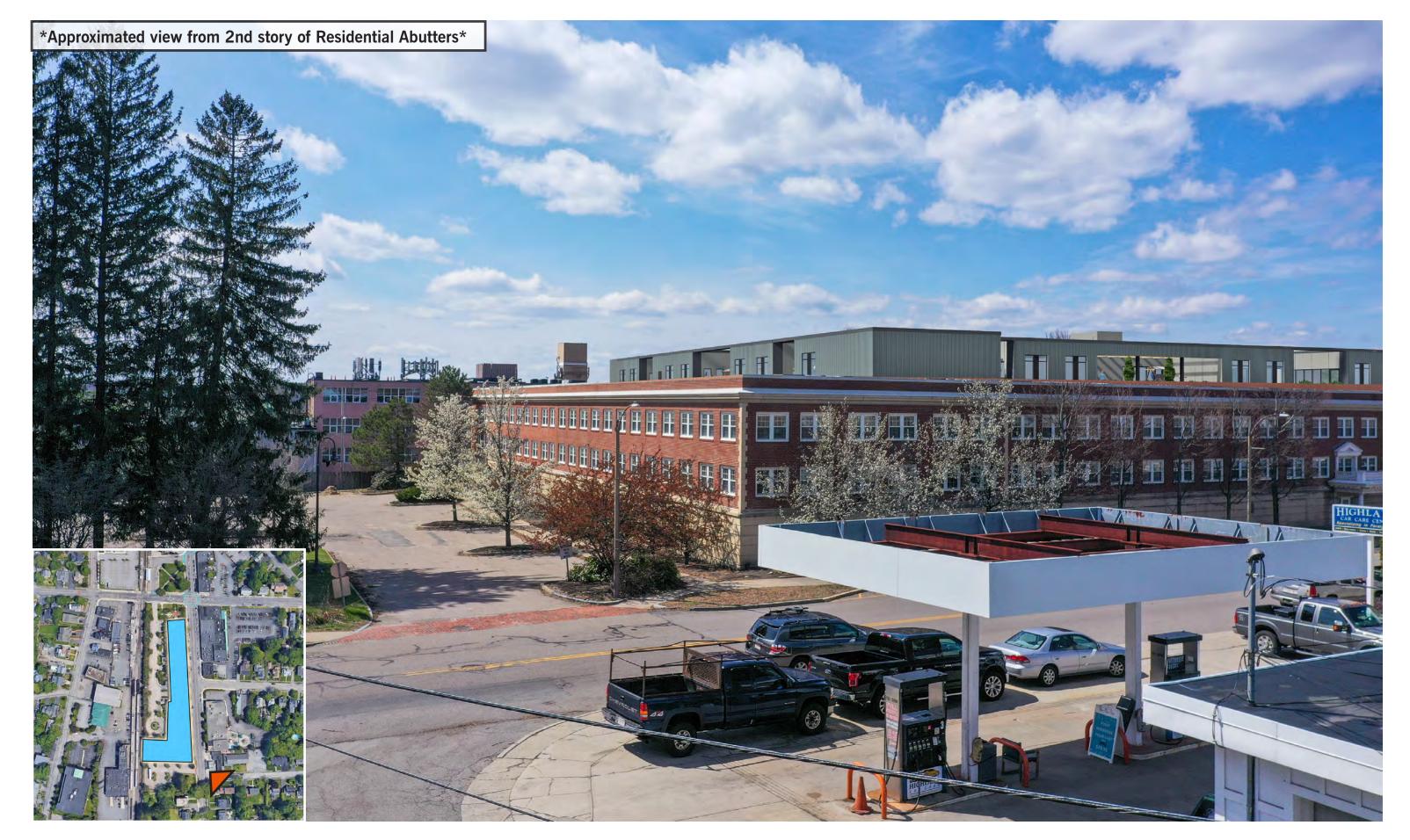




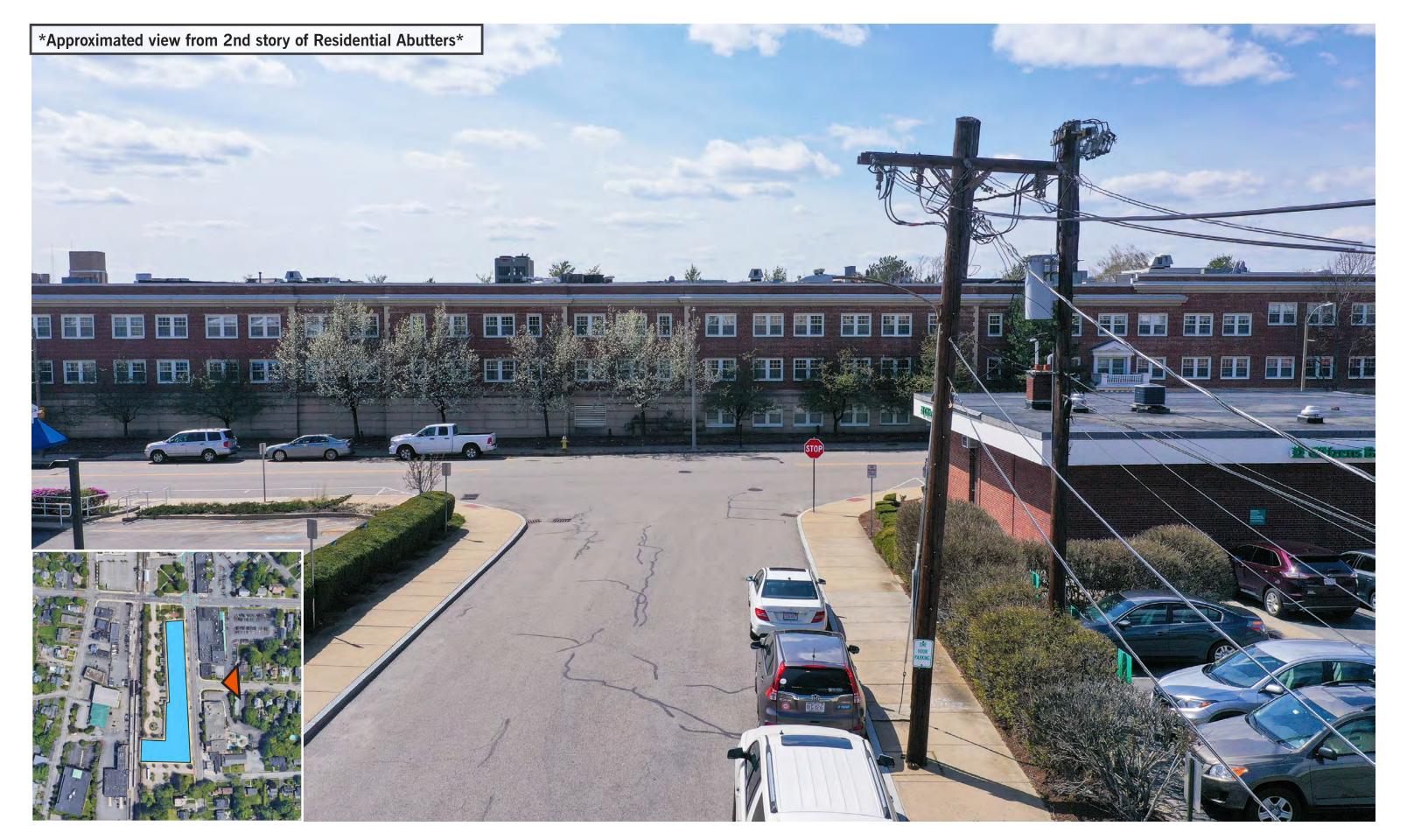




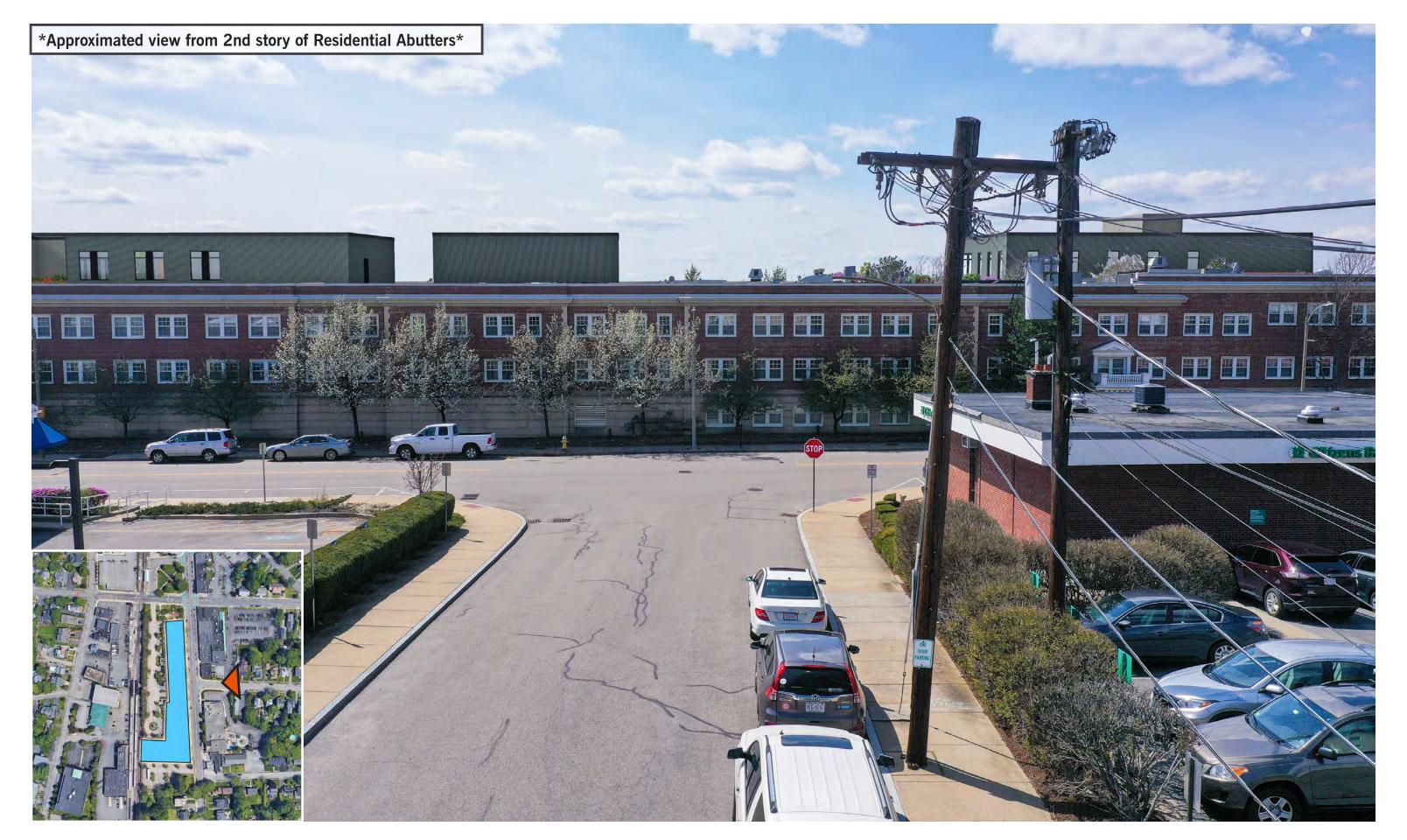




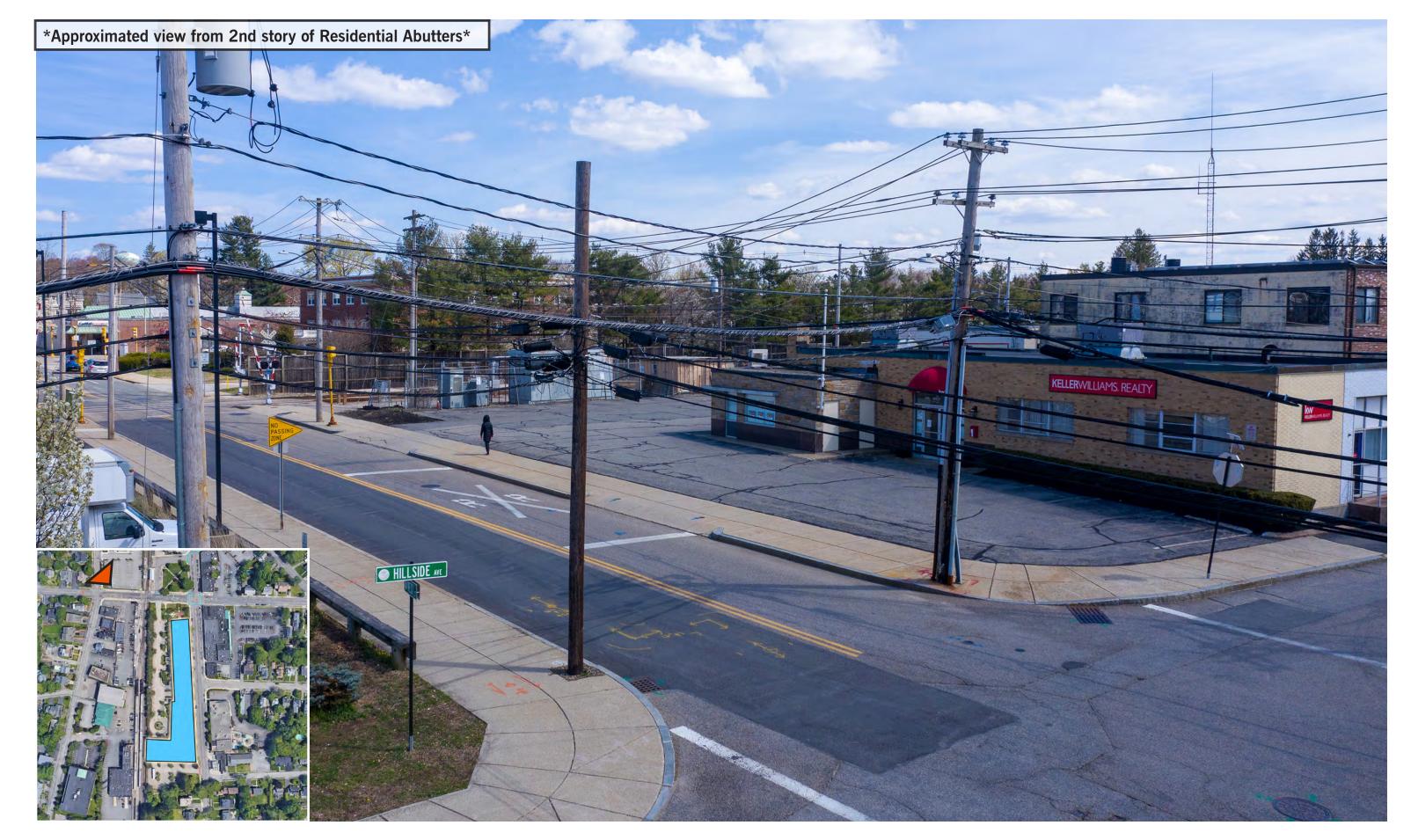




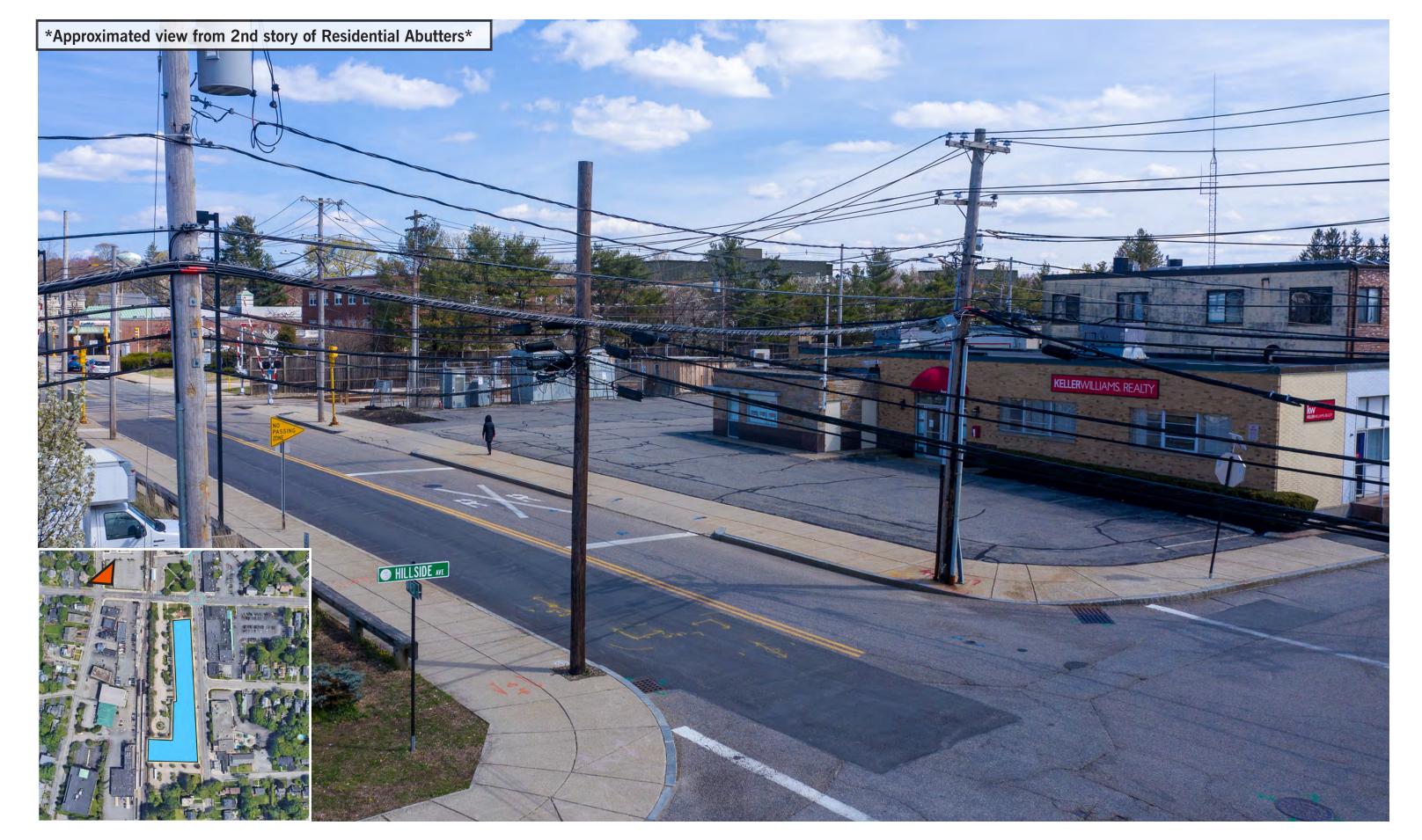








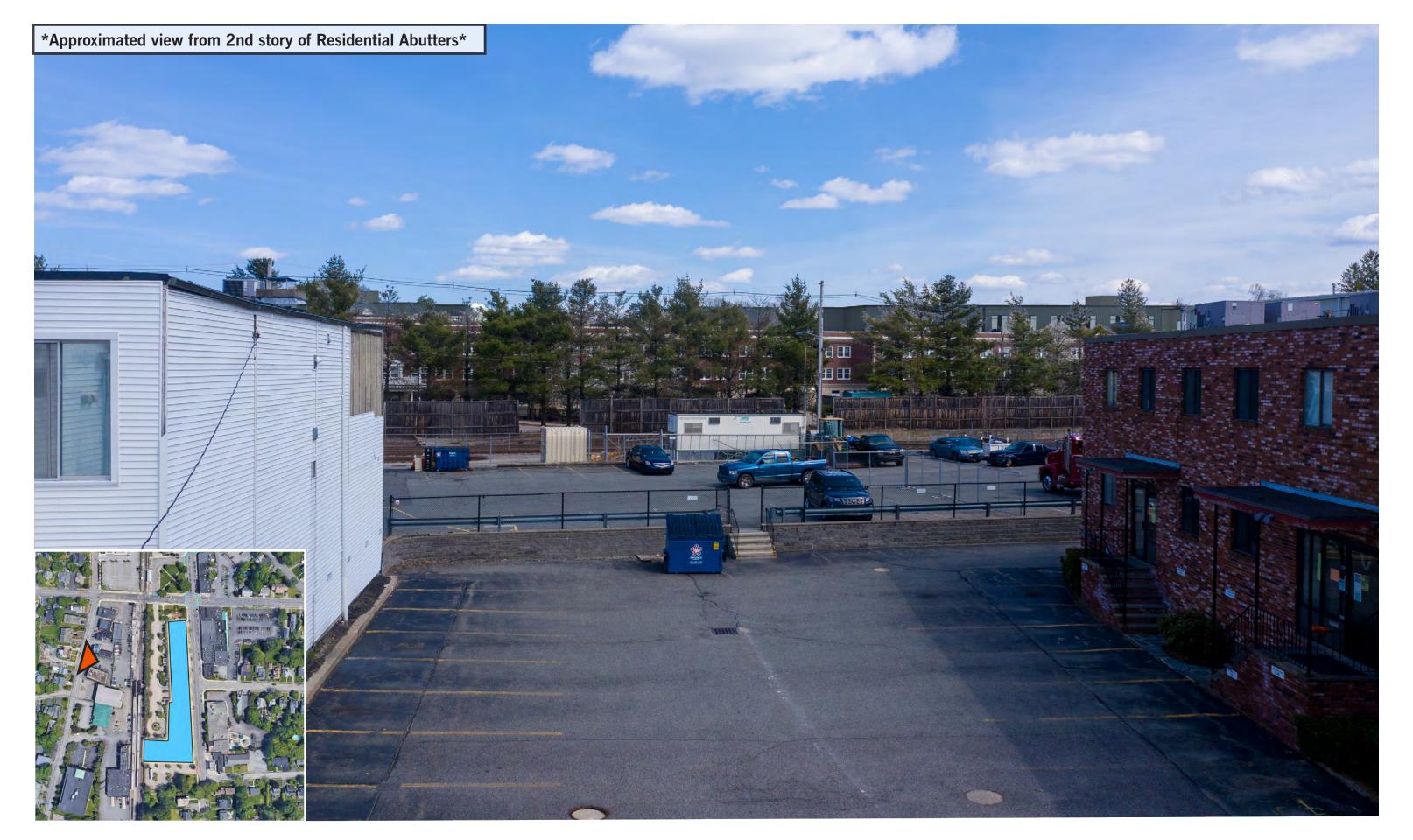




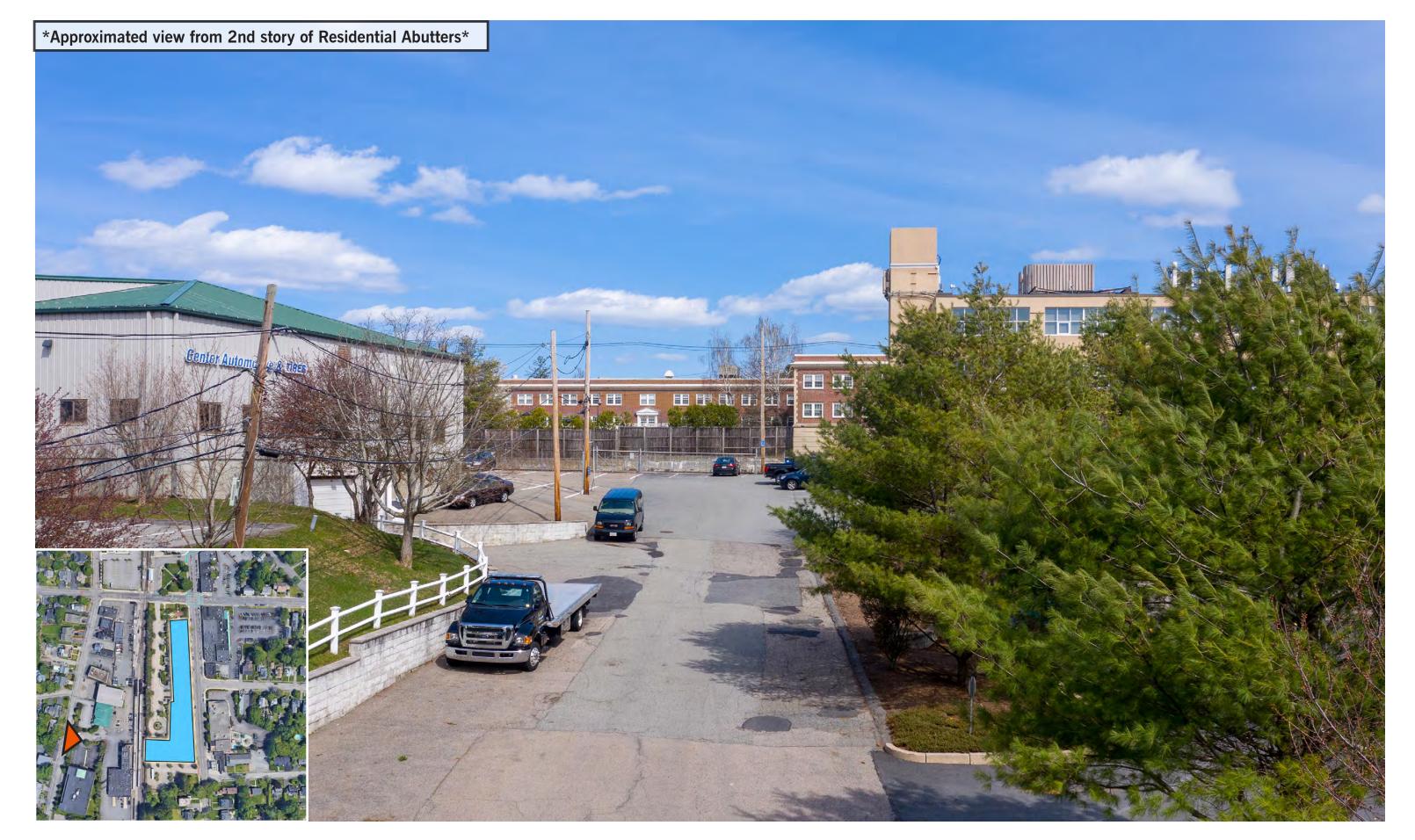




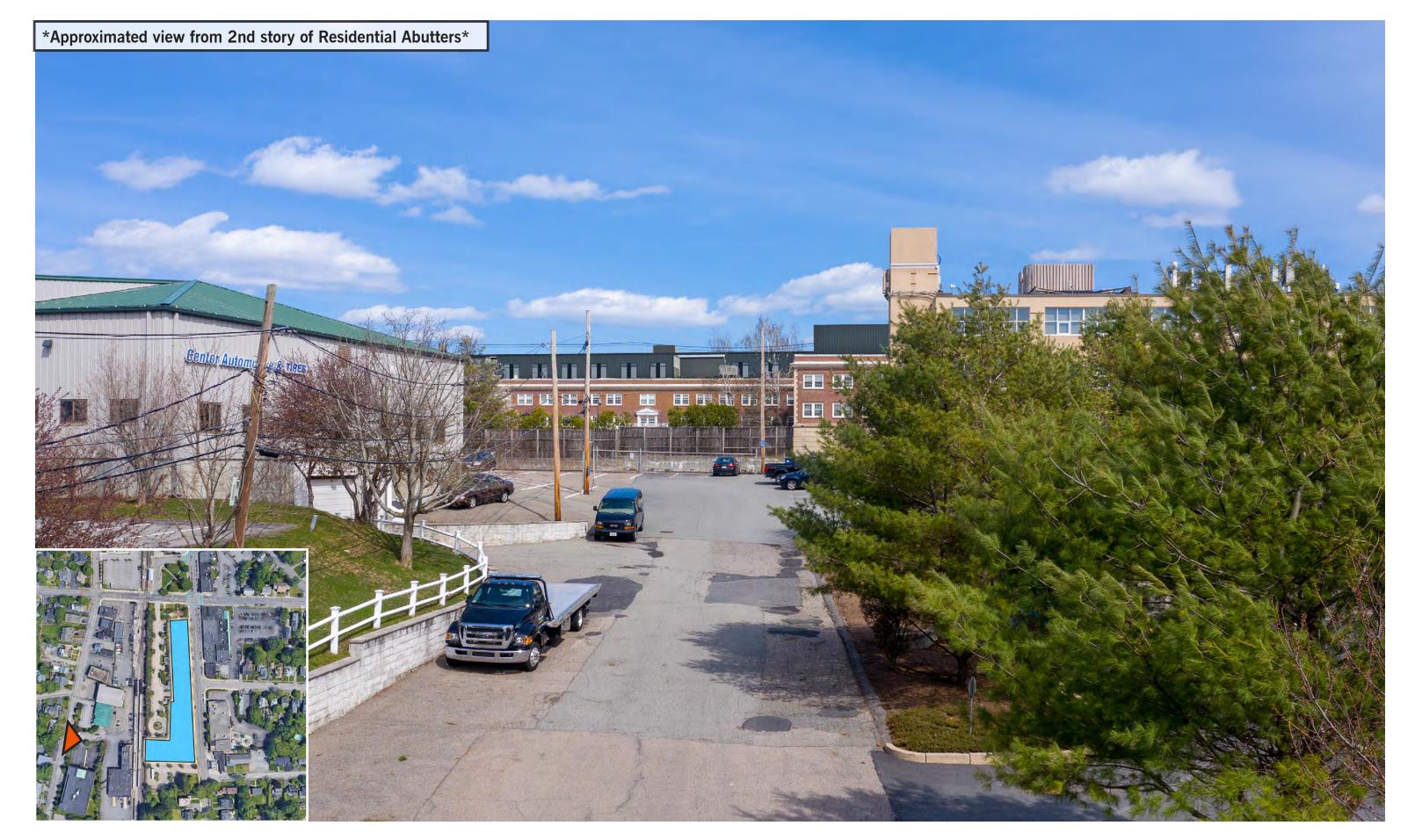




















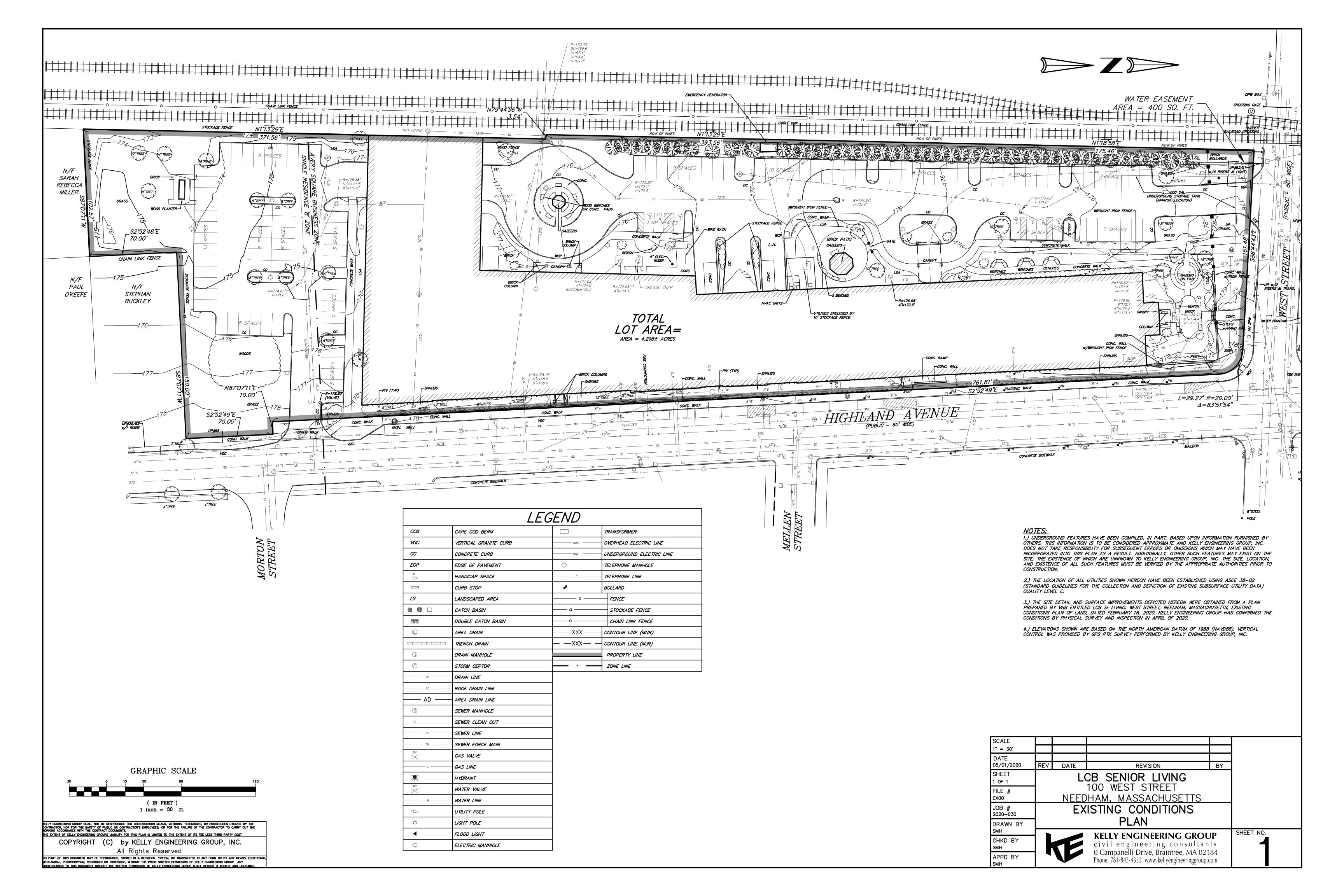


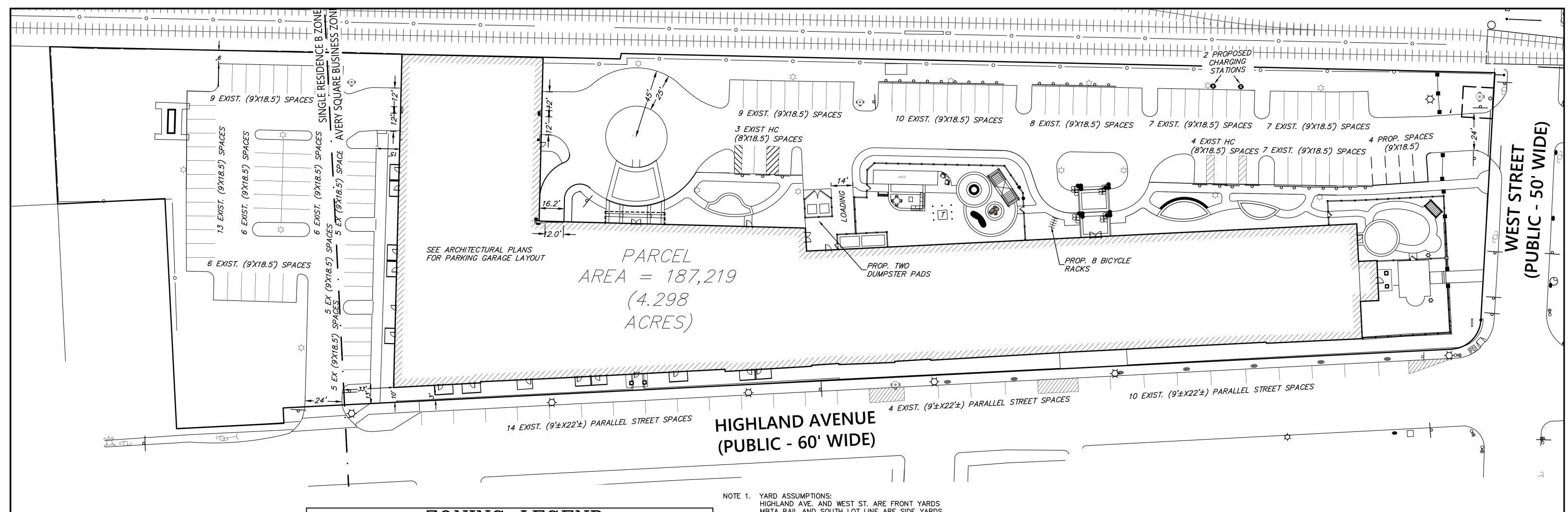














ZONING LEGEND

ZONING DISTRICT: AVERY SQUARE BUSINESS DISTRICT/ SINGLE RESIDENCE B (DIMENSIONAL REQUIREMENTS PROVIDED FOR AVERY SQUARE BUSINESS DISTRICT ONLY)

•				·
	REQUIRED	EXISTING	PROPOSED	COMPLIANCE
MIN. AREA	10,000 S.F.	187,219 S.F. (4.30 AC)	SAME	YES
MIN. FRONTAGE	80'	856'±	SAME	YES
MIN. SETBACK FRONT	10'	10 ' ±	10'	(NOTE 1) ZONING CHANGE
MIN. SETBACK SIDE (RESIDENTIAL DISTRICT)	50' (NOTE 1)	33'±	SAME	PRE-EXISTING NONCONFORMING
MIN. SETBACK SIDE	NA	0'±	SAME	YES
MIN. SETBACK REAR	NA	NA	SAME	YES
MAX. STORIES	2 (NOTE 2)	3	4	ZONING CHANGE
MAX. HEIGHT	35'	41'-9" (NOTE 3)	49' (NOTE 3)	ZONING CHANGE
BUILDING COVERAGE	NA (NOTE 4)	0.34	SAME	YES
FLOOR AREA RATIO	0.7 (NOTE 5	1.00±	1.08±	ZONING CHANGE
PARKING TOTAL	148 (NOTE 6)	193	176	ZONING CHANGE/SP
DRIVEWAY OPENINGS	18'-25' (TWO WAY)	24'	24'	YES

ZONING BYLAW 5.1.3 PARKING PLAN AND DESIGN REQUIREMENTS

A) PARKING ILLUMINATION	AVG 1 FOOT CANDLE	NA	AVG 1 FOOT CANDLE	YES	
B) LOADING REQUIREMENTS	1	2	1	YES	
C) HANDICAPPED PARKING	6	7±	SAME	YES	
D) DRIVEWAY OPENINGS	2	2	SAME	YES	
E) COMPACT CARS	50% (8'X16')	38±%	23% (NOTE 7)	YES	
F) PARKING SPACE SIZE	9'x 18.5'	9'x18.5'	SAME	YES	
G) BUMPER OVERHANG	1' OVERHANG	NONE REQUIRED	SAME	YES	
H) PARKING SPACE LAYOUT	(NOTE 8)	0	INCL. 5 TANDEM (NOTE 8)	SPECIAL PERMIT	
I) AISLE WIDTH EXTERIOR	24' (90 DEG. STALL)	24'	SAME	YES	
I) AISLE WIDTH INTERIOR	24' (90 DEG. STALL)	16'-8"	SAME (NOTE 9)	SPECIAL PERMIT	
J) PARKING SETBACK					
-FRONT	10'	13'±	SAME	YES	
-SIDE	4'	9'±	SAME	YES	
-REAR	4'	NA	SAME	YES	
-BUILDING	5'	15 ' ±	SAME	YES	
K) LANDSCAPED AREAS	10%	>10% (NOTE 10)	11%- 12% (NOTE 10)	YES	
L) TREES	1 PER 10 SPACES	(NOTE 11)	(NOTE 11)	YES	
M) LOCATION	WITHIN LOT	WITHIN LOT	SAME	YES	
N) BICYCLE RACKS	8	0	8	YES	

MBTA RAIL AND SOUTH LOT LINE ARE SIDE YARDS THERE ARE NO REAR YARDS

EXISTING BUILDING WILL REMAIN 10' FROM FRONT YARD. PROPOSED PATIOS ARE 3' FROM FRONT PROPERTY LINE, BUT ARE NOT CONSIDERED TO BE STRUCTURES. A ZONING CHANGE IS NEEDED BECAUSE, AT PRESENT, ZONING BYLAW SECTION 4.4.4 DOES NOT ALLOW PAVING IN THE ASB DISTRICT FRONT SETBACK AREAS, EXCEPT FOR WALKWAYS AND DRIVEWAYS.

THE TOWN OF NEEDHAM ZONING BYLAW SECTION 4.4.8.4, 50' SETBACK TO RESIDENTIAL DISTRICT

NOTE 2. THE TOWN OF NEEDHAM ZONING BYLAW SECTION 4.4.3, 2 STORIES INCLUDING GROUND COVERED PARKING

NOTE 3. EXISTING BUILDING HEIGHT OF 33±' TO TOP OF ROOF. 41'9" TO TOP OF HIGHEST POINT (MECHANICAL OR ELEVATOR OVERRIDE)

> PROPOSED MAX ALLOWABLE BUILDING HEIGHT WILL BE 44' TO TOP OF PENTHOUSE AND ALL MECHANICALS OTHER THAN ELEVATOR OVERRIDE; 49' TO TOP OF ELEVATOR OVERRIDE. ACTUAL HEIGHTS ARE PLANNED TO BE SLIGHTLY LESS THAN MAX ALLOWABLE.

BUILDING HEIGHT WAS CALCULATED FROM THE AVERAGE GRADE PLANE OF THE EXISTING BUILDING OF 177.6±. THE PROPOSED PENTHOUSE ELEVATION IS 221.6± THE PROPOSED ELEVATOR OVERRUN ELEVATION IS 226.6±.

NOTE 4. THE TOWN OF NEEDHAM ZONING BYLAW SECTION 4.4.2 (E) THERE ARE NO LIMITATION ON LOT COVERAGE IN THE AVERY SQUARE BUSINESS DISTRICT

TOTAL BUILDING COVERAGE= 63,700 S.F./ 187,219 S.F.= 0.34

NOTE 5. FLOOR AREA RATIO:

EXISTING FAR = 186,300 S.F./187,219 S.F. = 1.00 FARPROPOSED FAR = 189,220 S.F./187,219 S.F. = 1.01 FAR

THE CALCULATION OF PROPOSED FAR DOES NOT INCLUDE UNDERGROUND PARKING. THE PROPOSED ZONING CHANGE, ALLOWING A MAXIMUM FAR OF 1.1, EXCLUDES SQUARE FOOTAGE OF UNDERGROUND PARKING FROM FAR CALCULATIONS.

SINCE THE CURRENT BYLAW DEFINITION OF FLOOR AREA EXCLUDES "UNENCLOSED PORCHES AND BALCONIES," THE PROPOSED FAR CALCULATION ALSO DOES NOT INCLUDE THE AREA OF PROPOSED FIRST FLOOR PATIOS AND ROOF TERRACES, ALL OF WHICH WILL BE UNENCLOSED.

NOTE 6. REQUIRED PARKING:

71± INDEPENDENT LIVING UNITS X 1.0 SPACES/UNIT (PROPOSED ZONING CHANGE) + 96± ASSISTED LIVING BEDS x 0.5 SPACES/ BEDS (TOWN OF NEEDHAM ZONING BYLAW SECTION 5.1.2) + 58± EMPLOYEES X 1 SPACE/2 EMPLOYEES ON LARGEST SHIFT

= 148± SPACES REQUIRED

PROVIDED: 34 GARAGE SPACES & 114 EXTERIOR PARKING SPACES = 148 SPACES (EXCLUDES 28 PARALLEL PARKING SPACES ON HIGHLAND AVE. ADJACENT TO THE PROPERTY THAT CAN BE COUNTED AS OFF-STREET PARKING PURSUANT TO SECTION 5.1.1.7 OF THE BYLAW FOR A TOTAL PARKING SUPPLY OF 176 SPACES.

NOTE 7. COMPACT PARKING: 34 PROPOSED COMPACT SPACES IN PARKING GARAGE.

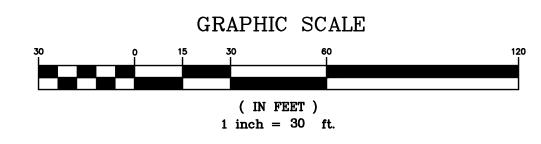
NOTE 8. PARKING SPACE LAYOUT: 5 TANDEM SPACES PROPOSED IN PARKING GARAGE. A SPECIAL PERMIT IS REQUESTED.

NOTE 9: INTERIOR AISLE WIDTHS IN THE GARAGE ARE 16'-8". SPECIAL PERMIT REQUESTED. THE EXISTING COLUMN TO COLUMN SPACING IS A UNIQUE CIRCUMSTANCE.

NOTE 10. LANDSCAPE AREAS: BETWEEN 11% AND 12% OF THE INTERIOR PORTION OF THE PARKING AREAS IS LANDSCAPED. THE AREAS OUTSIDE THE PERIMETER OF THE PAVED PARKING AREAS ARE NOT INCLUDED IN THIS CALCULATION. THIS SATISFIES THE REQUIREMENT THAT 10% OF THE PARKING AREA BE LANDSCAPED. AS WELL AS THE REQUIREMENT THAT AT LEAST ONE QUARTER OF THE LANDSCAPED AREA BE LOCATED IN THE INTERIOR OF THE PARKING AREA.

NOTE 11. TREES: SEE LANDSCAPE PLAN BY HAWK DESIGN, INC.

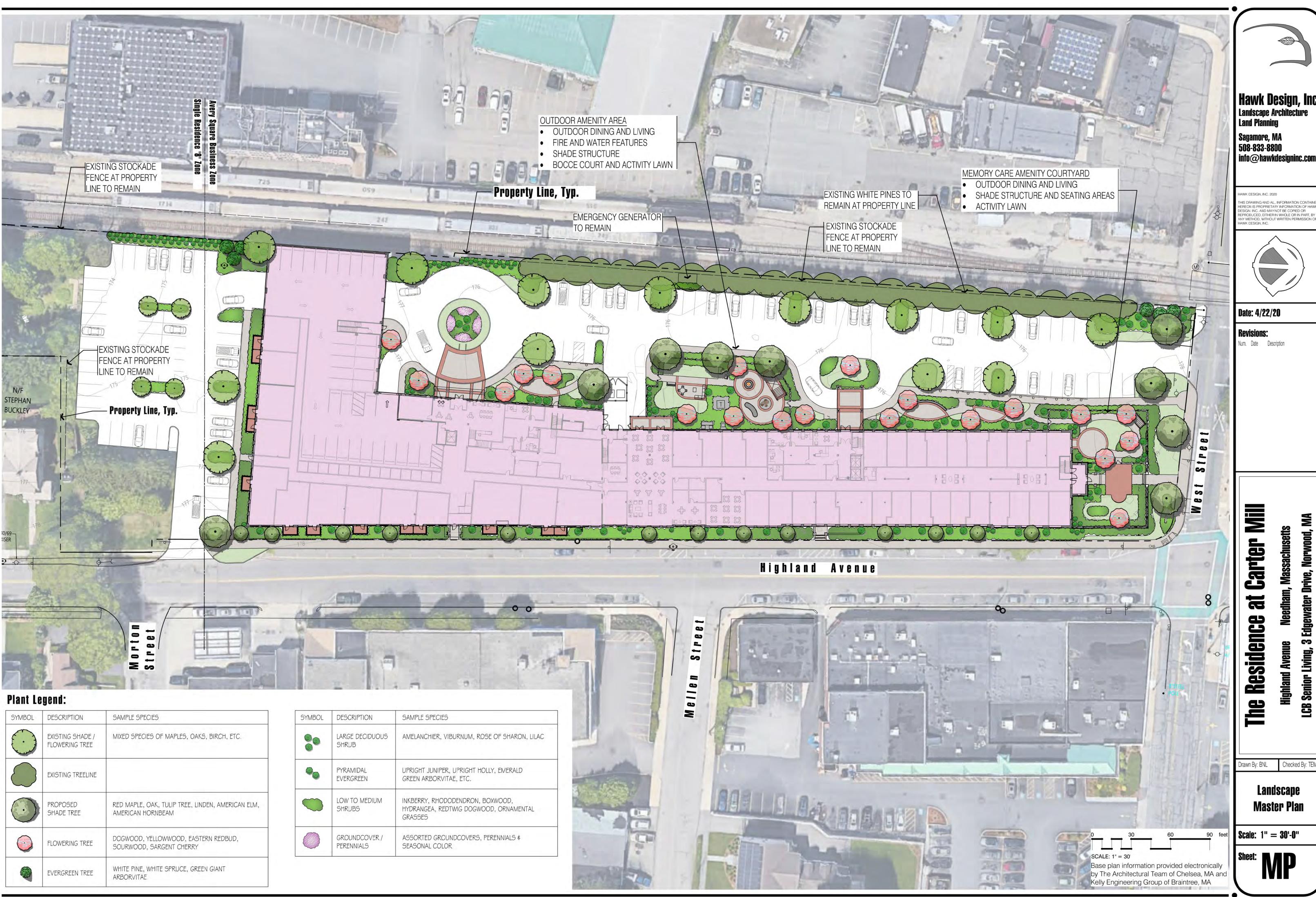
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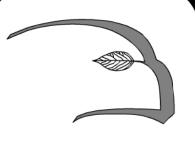


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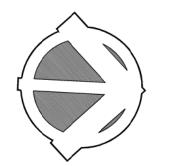
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Hawk Design, Inc. Landscape Architecture Land Planning Sagamore, MA 508-833-8800

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Date: 4/22/20

Revisions:

Num. Date Description

Carter Mill A

LCB Senior Living, 3 Edgewater Drive, Norwood, MA

Drawn By: BNL Checked By: TEM

Landscape **Master Plan**

Scale: 1" = **30**'-**0**"

Fiscal Impact Analysis

The Residence at Carter Mill 100 – 110 West Street Needham, MA

LCB Senior Living
Independent Senior Housing & Assisted Living
May 4, 2020



FOUGERE PLANNING & DEVELOPMENT, Inc. Mark J. Fougere, AICP

1. Introduction

Fougere Planning and Development, Inc. has been engaged by LCB Senior Living to undertake a Fiscal Impact Analysis in order to outline estimated revenues and service demands to the Town of Needham from a proposal to redevelop the former Avery Square nursing home/assisted living complex (200 beds) and a medical office space (11,800 sq. ft.) to a 154 senior housing unit community serving 83 assisted living units and 71 independent senior housing apartments. proposed project will be located at 100 West Street and will occupy an existing three story vacant building on a 4.29 acre site. Fourth story penthouse apartment units are proposed on part of the roof and existing surface parking and garage parking will be available. Numerous on site amenities are proposed including full meal service, an indoor pool, gym, bocce court, transportation, outdoor gathering areas; along with support services to those who are in need. Construction is anticipated to take 18 months to complete, with an estimated opening in the spring of 2023. In addition, Needham's senior center, The Center at the Heights, the library, the commuter rail station and numerous retail and service businesses are all within walking distance of the property.

2. Local Trends

Population

Needham's population has seen measured growth over the last 17 years, with most population growth occurring from the sale of existing housing units.

Census¹ figures report that from 2000 to 2017 Needham's population increased from 28,991 to 30,429 representing a 5% growth rate over the 17-year census period. During this same time frame children age 5 – 19 have increased 17.5%, rising from 6,009 to 7,064. Even with the migration of young families, Needham

¹ 2000 - 2010 Census figures and 2017 American Community Survey.

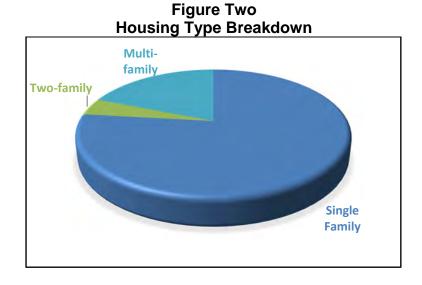
has aged, with those over the age of 60 increasing from 6,371 to 7,454 (a 17% increase) since 2000, Figure One. LCB Senior Living will be serving this aging population, as it is estimated that 35% - 40% of their residents will be from Needham.

Figure One
Residents Over the Age of 60

7,600
7,400
7,200
7,000
6,800
6,600
6,400
6,200
6,000
5,800
2000
2010
2017

Housing

The majority of Needham's housing stock consists of single family homes, with Census data² showing 8,420 units (76.8%) out of a total housing stock of 10,963 as detailed in Figure Two.

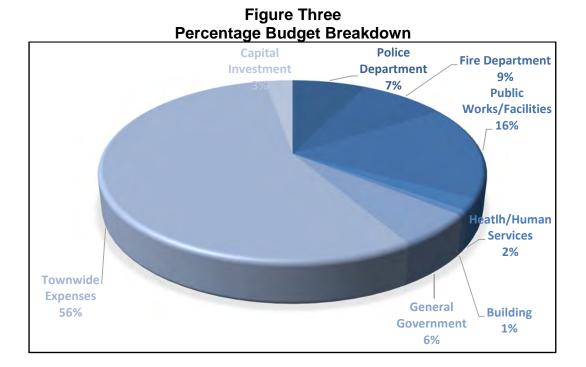


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² American Community Survey 2017

Budget History

Needham's total operating budget for 2019 was \$165,139,644. Public Safety and Education account for 53.1% of the total budget as detailed in Figure Three. As will be seen form the analysis outlined below, the Public Safety Department's will have the most measureable service impacts from the proposed use.



3. Fiscal Methodology

There are a number of methodologies that are used to estimate fiscal impacts of proposed development projects. The Per Capita Multiplier Method is the most often used analysis to determine municipal cost allocation. This method is the classic "average" costing method for projecting the impact of population growth on local spending patterns and is used to establish the costs of existing services for a new development. The basic premise of this method is that current revenue/cost ratios per person and per unit are a potential indicator of future revenue/cost impacts occasioned by growth. New capital expenditures required for provision of services to a development are not added to current costs; instead, the present debt service for previous improvements is included to represent ongoing capital projects. The advantage of this approach is its

simplicity of implementation and its wide acceptance by both consultants and local officials. The downside of this approach is that the methodology calculates the "average" cost as being the expected cost, which is often not the case and costs are exaggerated - significantly in some instances. (For example, if one student is added to a school system, limited cost impacts will occur; however based on an "average" cost to educate one student the cost could be noted as \$15,000/year, which includes such costs as existing debt, building maintenance, administrative and other factors, all of which will be minimally impacted by the addition of one student. The "true cost" could be significantly less, especially in those communities with declining enrollment.)

The Marginal Cost Approach is a more realistic methodology that can be used to estimate and measure developmental impacts based on <u>actual</u> costs that occur in the community. At this time, a "level of service" exists in Needham to serve the community. This existing service level, for the most part, addresses the needs of the community through existing tax collections. As new development occurs, pressures are placed on some departments to address increased demands, while other departments experience negligible, if any impacts. In reviewing the potentially impacted town departments specifically, a truer picture of anticipated cost impacts can be determined.

Given the nature of the contemplated redevelopment of the 100 West Street property, as will be shown by the analysis below, measurable impacts will be limited to a few Town departments. Any required off-site traffic and roadway improvements are expected to be addressed during the approval processes with the Town. Also, a very similar use existed on the property for many years with little traffic impact. Solid waste generated by the proposed use will be removed by a private hauler, consistent with existing practices. Any ongoing sewer and water expenses associated with potable water use and sewage generated by the proposed use will be offset through user fees. All on-site property improvements will be private and all maintenance expenses will be paid for by this project owner. This report does not intend to imply that no costs will occur as a result of this project. Measurable impacts of the redevelopment are expected to result to

a few Town departments, most notably the Police and Fire Departments. Other Town agencies are projected to experience little or no measurable impacts from the project redevelopment proposal.

4. Local Revenues

Property Tax Revenue

Local property taxes provide the bulk of General Fund Revenues³ for Needham, with 2019 figures showing that 77.8% came from this source, with remaining income being derived from state aid and other receipts. The 2020 Real Estate Tax Rate for residential uses is \$12.49 and \$24.55 for Commercial/Industrial uses and Personal Property.

Table One outlines the estimated municipal property tax revenue that will be generated by the proposed project. The income approach is traditional used to estimate project values. At this time project revenues and expenses have not been finalized and therefore this methodology will not be used in this analysis. After speaking to local assessing officials and reviewing the Needham marketplace for comparable properties, we have estimated a project's value of \$37,675,931 which will generate \$470,572 in annual revenues to the General Fund. This major investment into the property will increase the value of the site by over \$28,000,000 compared to its existing assessment.

Table One Anticipated Yearly Property Tax Revenue

Site	Use Type	Assessed Value	Units	Value Per Unit
Avita of Needham	Assisted Lvg. & memory	\$10,912,000	62	\$176,000
Wingate of Needham	Assisted & Independent	\$33,614,100	120	\$280,118
Average		\$44,526,100	182	\$244,649
LCB Senior Living	154 Units	\$37,675,931		
Estimated Property		¢470 F72		
Taxes @ \$12.49		\$470,572		

³ FY2020 Recommended Budget.

Personal Property

Another source of income will be from Personal Property, which LCB Senior Living estimates will be worth \$2,000,000. These assets are taxed at the Commercial rate of \$24.55 and will generate **\$49,100** in yearly revenue.

Excise Taxes

Another major source of income for communities is from motor vehicle excise taxes. In 2019 the Town of Needham collected \$4,900,000 for this revenue source. Transportation services will be made available to residents of the planned community. It is anticipated that those residing within the assisted living units will not own cars. For the independent senior living residents, we have assumed that 50% of these residents will own cars (35 vehicles). As outlined in Table Two, we estimate \$21,875 in yearly excise taxes from this revenue source.

Table Two
Annual Excise Taxes

Cars Value Total Value

35 \$25,000 \$875,000

\$25 x \$875 \$21,875

Community Preservation Surcharge

The Town of Needham has adopted the Community Preservation Act allowing the community to impose a 2% surcharge on property taxes. Based upon the projected taxes outlined in Table One, an estimated CPA surcharge of \$9,411 was calculated as outlined in Table Three.

Table Three						
Community Preservation Surcharge						
Property Taxes	CPA Surcharge	Surcharge				
Flopelly laxes	CFA Sulcharge	Suicharge				

Total Estimated Yearly Project Revenues

The proposed West Street development is estimated to generate \$550,958 in annual revenues from property taxes, personal property taxes, excise taxed and CPA surcharge as outlined in Table Four.

Table Four Estimated Yearly Revenue

Total Revenues	\$550,958
CPA Surcharge	\$9,411
Total Taxes	\$541,547
Excise Taxes	\$21,875
Personal Property	\$49,100
Property Taxes	\$470,572

Additional one-time payment revenues will also be realized as part of the development, these will be detailed further below.

5. Department Impacts

Public Safety

The Police and Fire Departments are projected to have the most measurable operational influences from the proposed project. To assess the degree of impact this project will have on these departments, emergency calls from similar uses in other communities and from two Needham comparable facilities were analyzed. The call data was averaged to determine the numbers of annual calls per unit. Table Five and Six summarizes these findings.

Table Five Emergency Police Service Calls

	•	Avg. Police	Avg. Call	Projected
Project	Units	Calls Per Year	Per Unit	Yearly Calls
Assisted Living Projects ⁴	300	101	0.2790	
Avita Needham	62	10	0.1613	
Total Average	362	111	0.3066	
Estimated LCB - Assisted	83			25
- · · · · •				
Senior Independent Apts. ⁵	252	272	1.0794	
Estimated LCB-Independent	71			77
Total Police Calls				102
Wingate Needham (68 assisted/ 52 independent)	120	31	0.1230	
Avery Square - closed Nursing Home/Assisted living	200	17	0.0675	

⁴ Waltham Crossings, Bridges Westford & Whitney Place Natick.

7

⁵ Heatherwood Tewksbury & Highland Westborough.

Table Six Emergency Fire/EMS Service Calls

Project	Units	Avg. Fire Call Per Year	Avg. Call Per Unit	Projected Yearly Calls
Assisted Living Projects ⁶	300	185	0.511	
Avita Needham	62	2	0.032	
Total Average	362	187		0.517
Estimated LCB-Assisted	83			43
Senior Independent Apts. ⁷	252	40	0.159	
Estimated LCB-Independent	71			11
Total Fire Calls				54
Wingate Needham (68 assisted/ 52 independent)	120	10		0.083
Avery Square - closed Nursing Home/Assisted living	200	10		0.050
Project	Units	Avg. EMS Calls Per Year	Avg. Call Per Unit	Projected Yearly Calls
Assisted Living Projects	300	250	0.833	
Avita Needham	62	31	0.500	
Total Average	362	281	0.776	
Projected LCB-Assisted	83			64
Senior Independent Apts.	252	240	0.952	
Estimated LCB-Independent	70			67
Total EMS Calls				131
Wingate Needham (68 assisted/ 52 independent)	120	246	2.050	
1		1		1

Extrapolating from the comparable call data, increases are projected to the Town's Police and Fire Departments. Annual police calls are projected to increase by 102 calls, annual fire/EMS calls are projected to increase by 185 calls. It should also be noted that the former Avery Square use generated⁸ 17 police calls a year and 78 fire/EMS calls yearly.

⁶ Waltham Crossings, Bridges Westford & Whitney Place Natick.

⁷ Heatherwood Tewksbury & Highland Westborough.

⁸ Historical call data obtained from the Police and Fire Departments.

LCB Senior Living regularly undertakes census audits of its existing communities and typically finds that between 35% and 40% of the residents who reside in a facility are from the town where the community is located. For the West Street development it is anticipated that 64 +/- residents (total population 185) will be from Needham. As existing residents of the community they may already be placing demands on Public Safety services and therefore are not creating any "new" demand. Although estimated emergency calls will not be discounted to account for these existing demands, they should be taken into consideration when evaluating police and fire impacts.

Police Department

The total gross Police Department budget in 2020 was \$7,050,521. As noted above, the Police Department is estimated to realize a yearly increase of 102 calls which represents less than a .003% increase total calls (Calls from 2016-18 range from 33,610 to 48,098). To assign some cost for the proposed increased call volume, the department's total budget was divided by the lowest number Calls for Service over the last three years. Based on a cost of \$210 per call, an impact of \$21,240 was calculated as outlined in Table Seven.

Table Seven					
	Estimated Police Department Costs				
Budget	Calls Per Year ⁹	Cost Per Call	Est. Calls	Cost	
\$7,050,521	33,610	\$210	102	\$21,420	

We discussed these findings and with the Chief of Police John Schlittler. He thought the estimated calls were reasonable and was not surprised that they would increase over the activity seen at the former nursing home that occupied the site. The Chief noted that these types of land uses can generate more demands on the Department such as investigations into theft and other allegations. These investigations can take time and may involve detective work, leading to many hours of effort on the part of his officers. The Chief felt the estimated cost impact to his Department may be too low. The full cost of a

⁹ To be conservative, the lower call volume over the last three years was used to result in a higher cost per call.

police officer for the Town is \$100,000. To be conservative, we will carry allocate the cost of $\frac{1}{2}$ an officers salary for this project, \$50,000. The Chief was satisfied with this cost allocation.

Fire Department

The 2020 Fire Department gross budget was \$9,316,814. The Fire Department will realize a greater impact from the proposed facility, with an estimated 54 fire calls and 131 EMS calls. Taking into consideration the former Avery nursing home's demands on the Department, 78 calls a year, results in an increased demand of service of 107 new calls. As with the police department, a cost per call has been calculated for the Department to arrive at a gross cost of \$179,332, Table Eight.

Table Eight
Estimated Fire Department Costs - Gross

Budget	Calls Per Year	Cost Per Call	Est. Calls	Cost
\$9,316,814	5,560	\$1,676	107	\$179,332

The Town of Needham collected \$1,081,616 in ambulance revenue in 2019, an average of \$521 a call. To arrive at a net cost for fire services, annual ambulance income of \$68,251 has been taken into account. Given the high levels of income in the community and the expectation that most of the residents will have adequate health care coverage, it is anticipated that estimated ambulance revenue will be higher that noted. Table Nine summarizes a net department cost of \$111,081 after taking into account anticipated annual ambulance revenue.

Table Nine Estimated Fire Department Costs - Net

EMS Rev./Call	Calls Per Year	Rev. Per Year	Net Cost
\$543	131	\$68,251	\$111,081

A meeting was held with Fire Chief Dennis Condon, as well as Fire Inspectors Ron Gavel and Jay Steeves. The proposed project was discussed, along with the estimated calls for service. The Chief noted that although this one project will not significantly impact his Department, general growth in the community is

straining operations. He has applied for grants to increase the number of fire fighter personal to help address the increased demands he has seen. The Chief felt the estimated cost of \$111,081 was a fair assessment of potential costs to his Department, which would cover the expenses of one full time fire fighter.

5. Health Department

Given the proposed use, it is estimated that two to three inspections are anticipated per year of the new facility. The kitchen area, along with other spaces will be inspected to ensure all relevant standards are being adhered to. Determining cost impacts is challenging and required annual fees will cover most costs. To account for unexpected expenses, we will carry a \$1,000 cost impact for this Department.

6. Other Departments

In reviewing other Town department, no other measurable impacts were seen. Building permit costs, \$10/\$1000 were more than offset any costs in the Building Department. Based upon the estimated construction costs of \$47,000,000 it is anticipated that \$470,000 will be generated in buildings fees. Additional fees will be paid for plumbing and electrical work.

7. Other Benefits

Other economic benefits are projected as a result of the proposed residential community, including additional meals taxes, local economic growth, and new construction jobs. The single phase construction lasting approximately 18 months will infuse a significant economic boost into the local and regional economy, with dozens of tradesmen involved in building the project and millions of dollars spent on construction supplies and materials.

8. Summary

Table Ten summarizes the estimated revenues and expenses associated with the proposed assisted living development. Gross revenues are anticipated to be \$550,988 a year with a net positive yearly benefit of \$388,877. This cost estimate is not inferring the Needham's budget will increase as a result of the proposed development, but assigns a "cost" to account for this new land use in the community. Appropriate discussions with key decision makers within the community will determine if budgets need to be adjusted to address demands estimated in the Report. It is anticipated that these total costs will not actually be realized.

Table Ten
Revenue & Expense Summary

Projected Tax Revenue	\$550,958
Projected Municipal Costs	
Police	-\$50,000
Fire	-\$111,081
Board of Health	-\$1,000
Total Costs	-\$162,081
Net Positive Fiscal Impact	+\$388,877

Summary of Findings

Given the following facts and the nature of the proposed LCB Senior Living project few impacts will be felt by town departments:

- All on site improvements will be private and all maintenance expenses will be paid for by this project owner.
- No school related impacts will occur.
- Solid waste generated by this project will be removed by a private hauler.
- Any water/sewer expenses will be offset through user fees.
- Measureable financial impacts upon non-Public Safety departments will be minimal.

This is not to infer that no costs will occur as a result of this project. Measurable demands for services will be felt by the Police and Fire Departments.

Key findings of the assisted living analysis include:

- Reflective of New England wide trends, Needham is aging with those individuals over the age of 60 increasing 17% since 2000.
- The proposed community will generate approximately \$550,958 in gross revenue per year. Taking into consideration estimated municipal costs of \$162,081, the proposed project will yield approximately \$388,877 in net positive yearly revenue annually.
- The existing property assessment is anticipated to increase from \$9,471,500 to \$37,675,931, an <u>increase</u> of over \$28,000,000. Property taxes will increase from \$175,411 to \$470,572.
- Annual calls to the Police Department are projected to increase by 102 calls (.002%), recent annual call volume over 48,098. The former use generated approximately 17 calls annually.

- The Fire Department is projected to receive approximately 185 new fire calls annually from the proposed use. Ambulance calls are to generate \$68,251 annual revenue for the community. The former use generated 78 yearly calls.
- For the senior living project, all onsite maintenance will be private; along with all trash collection. Therefore, there is no projected impact to the DPW Department.



Traffic Impact Study

Senior Living Residential Redevelopment

100-110 West Street Needham, MA



Prepared by

McMahon Associates, Inc.
120 Water Street, 4th Floor
Boston, MA 02109
617.556.0020

Prepared for LCB Senior Living

April 2020

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Appendix D: Traffic Projection Model

Appendix E: Highway Capacity Manual Methodologies

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Appendix H: 2026 Build Capacity/Level-of-Service Analysis

Appendix I: Capacity/Level-of-Service Analysis Summary

INTRODUCTION

McMahon Associates has completed a review of the existing traffic operations and potential traffic impacts associated with the proposed senior living residential redevelopment project at 100-110 West Street in Needham, MA. The purpose of this traffic impact study is to evaluate existing and projected traffic operations and safety conditions associated with the proposed redevelopment within the study area.

The assessment documented in this traffic impact study is based on a review of existing traffic volumes, recent crash data, and the anticipated traffic generating characteristics of the proposed project. The study examines existing and projected traffic operations (both with and without the proposed redevelopment) at key intersections in the vicinity of the project site. The study area was selected based on a review of the surrounding roadway network and estimated trip generating characteristics of the proposed project. This study provides a detailed analysis of traffic operations during the weekday morning and weekday afternoon peak hours, when the combination of adjacent roadway volumes and project trips would be expected to be the greatest. The study also reviews the previous on-site uses and their impacts to traffic and parking within the study area relative to the proposed project.

Based on the analysis of the proposed project and a review of the previous land use, the proposed project is estimated to have a lesser impact on study area traffic and to require less parking than both the previous land use and the proposed on-site parking supply. The proposed project is shown to have a negligible impact on the area roadways and intersections. The following report documents these findings.

Project Description

The proposed senior living residential redevelopment would be located at 100-110 West Street in Needham, MA, as shown in Figure 1. The site currently consists of a vacant building and associated parking that was previously used as an assisted living community, skilled nursing facility, and medical offices. The site is bounded by residential properties to the south, West Street to the north, Highland Avenue to the east, and Massachusetts Bay Transit Authority (MBTA) Commuter Rail tracks to the west. The proposed project would renovate the existing structure to include 83 units of senior assisted living (96 beds) and 71 units of independent senior housing. A total of 148 parking spaces would be provided on-site, including 34 interior garage spaces and 114 exterior spaces. Access to the site would continue to be provided via the two existing full-access driveways, one on West Street and one on Highland Avenue.

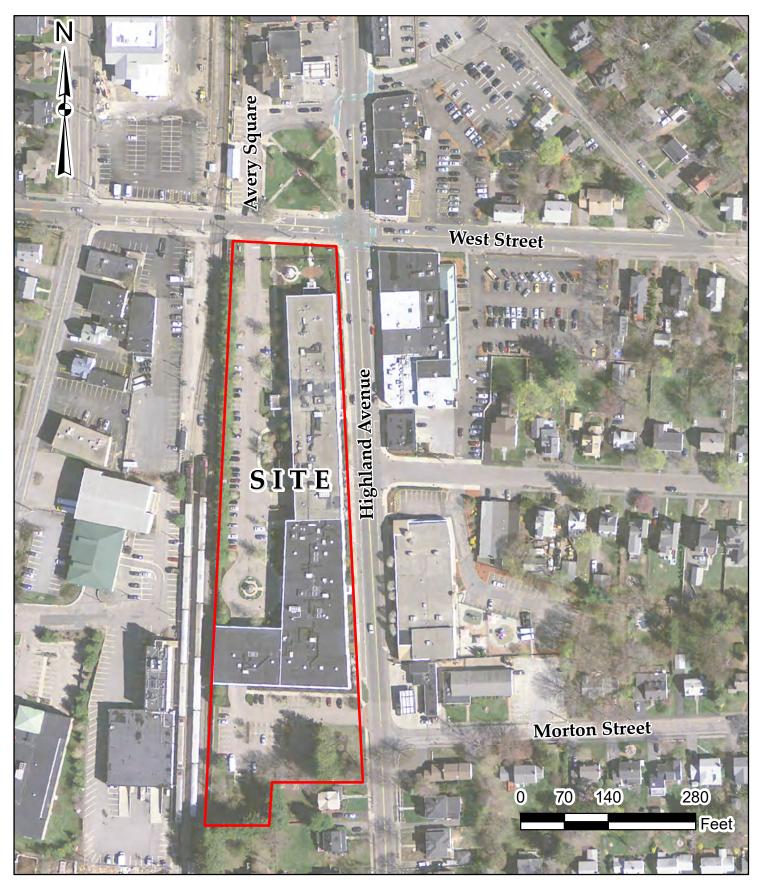




Figure 1 Site Location Map Senior Living Residential Redevelopment Needham, Massachusetts

Study Methodology

This traffic impact study evaluates existing and projected traffic operations within the study area for the weekday morning and weekday afternoon peak hour traffic conditions when the combination of the adjacent roadway volumes and estimated project trips would be greatest.

The study was conducted in three steps. The first step consisted of an inventory of existing traffic conditions within the project study area. As part of this inventory, manual turning movement counts were collected at key intersections during the weekday morning and afternoon peak periods. A field visit was also completed to document intersection and roadway geometries and available sight distances at the site driveways. Crash data for the study area intersections was obtained from the Massachusetts Department of Transportation (MassDOT) to determine if the study area has any existing traffic safety deficiencies.

The second step of the study builds upon the data collected in the first step to establish the basis for evaluating potential transportation impacts associated with the projected future conditions. During this second step, the projected traffic demands associated with any planned future developments that could influence traffic volumes at the study area intersections were assessed. Consistent with MassDOT traffic study guidelines, 2019 Existing traffic volumes were forecasted to the future year 2026 to determine 2026 No Build (without project) conditions and 2026 Build (with project) conditions.

The third step of this study determined if measures are necessary to improve future traffic operations and safety, minimize potential traffic impacts, and provide safe and efficient access to the site with the proposed project in place.

Study Area Intersections

Based on a review of the anticipated traffic generating characteristics of the proposed project and a review of the adjacent roadways serving the project site, the following study area intersections were selected for analysis:

- West Street at Highland Avenue
- West Street at the Site Driveway/Avery Square
- Highland Avenue at the Site Driveway/Morton Street

The traffic impact study presented in this report documents existing and future traffic conditions for the study area intersections noted above.

EXISTING CONDITIONS

An accurate assessment of the potential traffic impacts associated with the proposed senior living redevelopment requires a comprehensive understanding of the existing traffic conditions within the project study area. The existing conditions assessment included in this study consists of an inventory of intersection and roadway geometries, an inventory of traffic control devices, the collection of peak period traffic volumes, and a review of recent crash data. The existing conditions in the vicinity of the project site are summarized below.

Roadway Network and Intersections

The project site benefits from excellent access via the local and regional roadway system. A brief description of the principal roadways and public transportation providing access to the project site is presented below.

West Street

West Street generally runs in the east-west direction through the Town of Needham. West Street is classified as an urban collector under Town of Needham jurisdiction. West of the site, West Street provides one travel lane in each direction, measuring approximately 16.5 feet wide in the eastbound direction and approximately 12.5 feet wide in the westbound direction. Sidewalks are provided on the north and south side of West Street. At the signalized intersection of West Street and Highland Avenue, crosswalks and left turn lanes are provided on the West Street approaches. No bicycle facilities are provided on West Street. An advisory speed limit of 30 miles per hour (mph) is posted west of the site for vehicles travelling westbound, and an advisory speed limit of 25 mph is posted in both directions of travel to the east of the site.

Highland Avenue

Highland Avenue generally runs in the north-south direction through the Town of Needham and is classified as an urban principal arterial under Town of Needham jurisdiction. Highland Avenue generally provides one travel lane in each direction, each measuring approximately 14 feet in width with 8 foot wide parking spaces on both sides of the roadway adjacent to the site. A sidewalk is provided on both sides of Highland Avenue. No bicycle facilities are provided. South of the site on Highland Avenue, a speed limit of 30 mph is posted for vehicles travelling in the southbound direction, and a speed limit of 25 mph is posted for vehicles travelling in the northbound direction.

<u>Public Transportation</u>

The MBTA Commuter Rail Needham Heights station is located north of the intersection of West Street, Avery Square, and the site driveway. The station services the Needham line, which provides rail service between Needham Heights and Boston's South Station between 6:05 AM and 12:00 AM. The MBTA bus route 59 provides stops along Highland Avenue with service between Needham Junction and Watertown Square. Bus stops in the vicinity of the

site are located at the intersection of Highland Avenue at Mark Lee Road to the north of the site, and the intersection of Highland Avenue at Dana Place south of the site.

Existing Traffic Volumes

Existing Peak Hour Traffic Volumes

To assess peak hour traffic conditions, manual turning movement counts were conducted at the study area intersections during the weekday morning and weekday afternoon peak periods.

Counts were conducted at the study area intersections on Thursday, December 5, 2019 from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM. The results of the turning movement counts are tabulated by 15-minute periods and are provided in Appendix A of this report. The four highest consecutive 15-minute intervals during each of these count periods constitute the peak hours that are the basis of the traffic analysis provided in this report. Based on a review of the peak period traffic data, the weekday morning peak hour at the study area intersections occurs between 7:15 AM and 8:15 AM and the weekday afternoon peak hour occurs between 4:30 PM and 5:30 PM.

A 48-hour Automatic Traffic Recorder (ATR) count was conducted on Highland Avenue north of Morton Street on from Wednesday, December 18 to Thursday, December 19, 2019. The results of the ATR count are provided in Appendix A of this report and are summarized in Table 1 below.

Table 1: ATR Data Summary

		AM Commuter ⁽²⁾	PM Commuter ⁽³⁾	85 th Percentile
Direction	ADT ⁽¹⁾	Peak Hour	Peak Hour	Speed (mph)
Northbound	6,190	492	407	32
Southbound	<u>5,950</u>	<u>320</u>	<u>518</u>	<u>34</u>
Combined	12,140	812	925	33

- (1) Average daily traffic volume in vehicles per day.
- (2) Weekday morning commuter peak (7:00 AM to 9:00 AM) occurs between 7:30 AM and 8:30 AM.
- (3) Weekday afternoon commuter peak (4:00 PM to 6:00 PM) occurs between 4:30 PM and 5:30 PM.

As shown in Table 1, the ATR count on Highland Avenue shows an Average Daily Traffic (ADT) volume of approximately 6,200 vehicles in the northbound direction and approximately 5,950 vehicles in the southbound direction. The 85th percentile speeds in the northbound and southbound directions are 32 and 34 mph, respectively.

Seasonal Variation

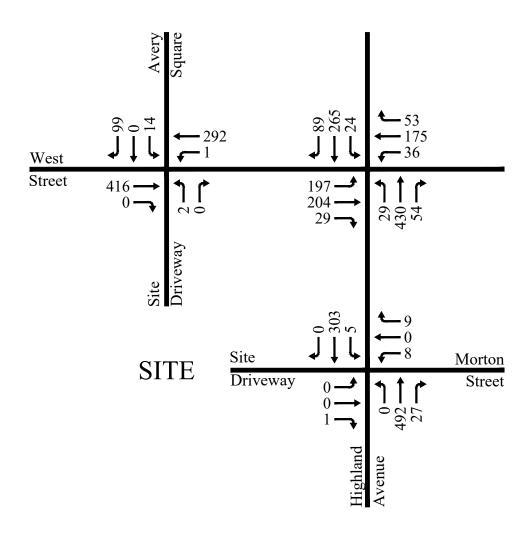
In order to account for seasonal variation in traffic volumes, continuous count data from a MassDOT count station on I-95 in Newton, MA were reviewed. Based on the seasonal trends

of the data, traffic counts collected during the month December are shown to be approximately 4% lower than the average month. Therefore, in order to provide a conservative analysis, the existing peak hour traffic volumes were adjusted upward by approximately 4% to represent an average month. The seasonal adjustment data from the continuous count station referenced is provided in Appendix B of this report.

The peak hourly traffic flows for the 2019 Existing conditions are depicted in Figure 2 for the weekday morning peak hour and Figure 3 for the weekday afternoon peak hour.

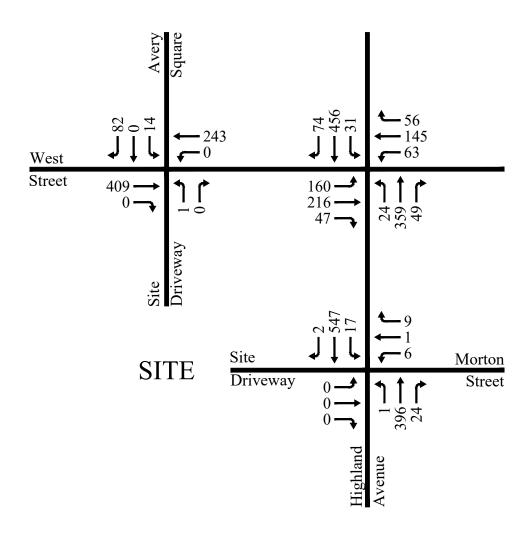
The project site is currently vacant. However, the project site was previously occupied by an assisted living community, skilled nursing facility, and medical offices. The previous site uses are shown to have a higher number of trips and higher parking demand than the currently proposed redevelopment. The traffic components associated with the previous land use are discussed in subsequent sections of this report.













Crash Summary

Crash data for the study area intersections was obtained from MassDOT for the five-year period from 2013 through 2017. A summary of the crash data is presented in Appendix C.

The MassDOT Crash Rate Worksheet calculations were used to determine whether the crash frequencies at the study area intersections were unusually high given the travel demands at each location. The MassDOT Crash Rate Worksheet calculates a crash rate expressed in crashes per million entering vehicles. The calculated rate is then compared to the average rate for signalized and unsignalized intersections statewide and within MassDOT District 6. For signalized intersections, the statewide average crash rate is 0.78 crashes per million entering vehicles and the MassDOT District 6 crash rate is 0.71 crashes per million entering vehicles. For unsignalized intersections, the statewide average crash rate is 0.57 crashes per million entering vehicles and the MassDOT District 6 crash rate is 0.52 crashes per million entering vehicles. All of the crashes summarized as part of this analysis occurred during the time that the previous site was occupied and operational as the assisted living community, skilled nursing facility, and medical offices.

The signalized intersection of West Street at Highland Avenue is reported to have experienced a total of 30 crashes during the five-year period analyzed, resulting in a crash rate of 0.77 crashes per million entering vehicles, below the statewide average crash rate and above the MassDOT District 6 average crash rate. The intersection is not a MassDOT Highway Safety Improvement Project (HSIP) high-crash cluster. Of the 30 reported crashes at the intersection of West Street at Highland Avenue, ten were angle collisions, nine were rear-end collisions, and nine were sideswipe collisions. Four of the reported crashes resulted in personal injury, 25 resulted in property damage only, and the severity of one crash not reported. Based on conversations with the town of Needham, this intersection is anticipated to be reconstructed in the future to improve pedestrian lighting, drainage, and traffic operations.

A total of six crashes were reported at the intersection of West Street at the site driveway/Avery Square from 2013 to 2017, resulting in a crash rate of 0.34 crashes per million entering vehicles. Four of the reported crashes were angle collisions. All of the reported crashes at the intersection resulted in property damage only.

At the intersection of Highland Avenue at the site driveway/Morton Street, five crashes were reported during the five-year study period, resulting in a crash rate of 0.21 crashes per million entering vehicles. Of these crashes, three were rear-end collisions. Three of the five reported crashes resulted in personal injury, and the other two resulted in property damage only.

FUTURE CONDITIONS

To determine future traffic demands on the study area roadways and intersections, the 2019 Existing traffic volumes were projected to the future-year 2026, in accordance with MassDOT guidelines. Traffic volumes on the study area roadways in 2026 are assumed to include all existing traffic, as well as new traffic resulting from general growth in the study area and from other planned development projects, independent of the proposed project. The potential background traffic growth, unrelated to the proposed project, was considered in the development of the 2026 No Build (without project) peak hour traffic volumes. The estimated traffic increases associated with the proposed project were then added to the 2026 No Build volumes to reflect the 2026 Build (with project) traffic conditions. A more detailed description of the development of the 2026 No Build and 2026 Build traffic volume networks is presented below.

Future Roadway Improvements

Planned roadway improvement projects can impact travel patterns and future traffic operations. MassDOT project information and the Town of Needham were consulted to develop an understanding of future area roadway improvement projects. Two projects which may affect traffic conditions at the study area intersections were identified.

A MassDOT roadway improvement project on Highland Avenue is currently in the preconstruction phases, with construction planned for 2020. This project would construct roadway improvements such as widened sidewalks, separated bicycle facilities, and vehicle turn lanes at intersections along Highland Avenue between its intersections with Route 9 in Newton and Webster Street in Needham, just under 0.4 miles to the north of West Street. This project would alter traffic operations along Highland Avenue within its project limits, but is not expected to significantly affect travel volumes at the study area intersections for the proposed assisted living redevelopment. For this reason, changes associated with the Highland Avenue improvement project are expected to be captured within the overall background growth rate described below.

The Town of Needham is planning an intersection improvement project at the intersection of West Street at Highland Avenue. The project is currently in the design phase, with construction funding anticipated to be acquired in the summer of 2020. The exact scope of the improvement project is not known at this time, but is expected to include at a minimum updated traffic signal phasing and timings along with pedestrian and drainage improvements. The capacity analysis described in this report utilizes optimized traffic signal timings and phasing for future 2026 No Build and 2026 Build conditions. In order to present a conservative analysis of future traffic conditions, no geometric changes are included in these future-condition analyses.

Background Traffic Growth

Traffic growth is generally a function of changes in motor vehicle use and expected land development within the area. In order to predict the rate at which traffic on the study area roadways can be expected to grow during the seven-year forecast period (2019 to 2026), both planned area developments and historic traffic growth were reviewed.

Site-Specific Growth

Based on discussions with the Town of Needham Planning Department, no site-specific developments were identified which would be anticipated to impact traffic volumes within the study area. A proposal for a zoning change in an area approximately 0.6 miles to the north of the site and bounded by Highland Avenue, Gould Street, and I-95 is currently being studied by the Town. This zoning change may allow additional development to occur in this area which could affect vehicle volumes along Highland Avenue, but the extent and exact scale of the impact is unknown at this time.

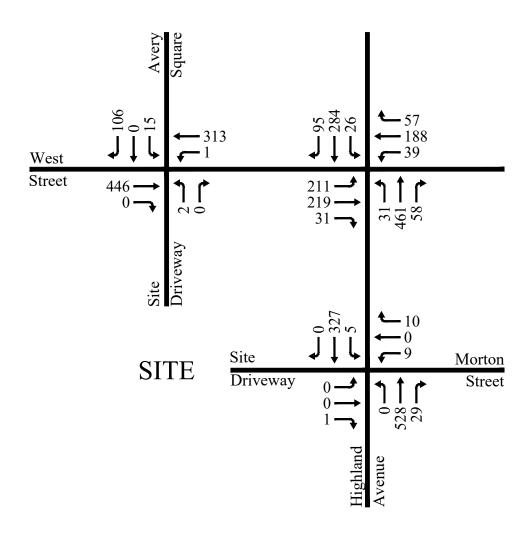
Historic Traffic Growth

Based on discussions with the Town of Needham Engineering Department, an annual growth rate of one percent per year was identified. The one percent growth rate, compounded annually, was utilized to capture traffic growth associated with general changes in population, other smaller developments, and developments that may not be known at this time.

2026 No Build Traffic Volumes

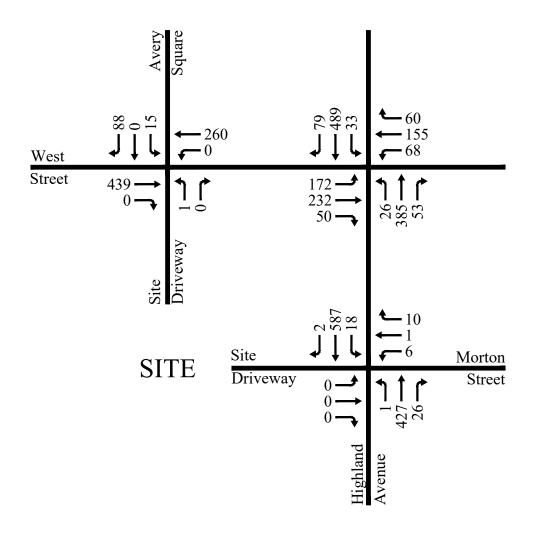
The 2019 Existing peak hour traffic volumes were grown by one percent per year (compounded annually) over the seven-year study horizon (2019 to 2026) to establish the 2026 No Build weekday morning and afternoon peak hour traffic volumes, which are illustrated in Figure 4 and Figure 5, respectively, and are documented in the traffic projection model presented in Appendix D of this report.













Site-Generated Traffic

In order to estimate the number of vehicle trips associated with the proposed senior living residential redevelopment, the Institute of Transportation Engineers' (ITE) publication, *Trip Generation Manual*, 10th Edition, was referenced. ITE is a national research organization of transportation professionals, and *Trip Generation Manual*, 10th Edition provides traffic generation information for various land uses compiled from studies conducted by members nationwide. Vehicle trip estimates for the proposed senior living residential redevelopment were developed based on data presented in this publication for Land Use Codes 252 (Senior Adult Housing – Attached), and 254 (Assisted Living). This reference establishes vehicle trip rates (in this case expressed in trips per dwelling unit for senior adult housing and number of beds for assisted living) based on actual traffic counts conducted at similar types of existing land uses. Table 2 presents the estimated vehicle trips associated with the proposed senior living residential redevelopment.

Table 2: Proposed Project Trips

		We	PM				
Description	Size	In	Out	Total	In	Out	Total
Senior Adult Housing (1)	71 Units	5	9	14	11	9	20
Assisted Living ⁽²⁾	<u>96 Beds</u>	<u>11</u>	<u>7</u>	<u>18</u>	<u>9</u>	<u>15</u>	<u>24</u>
Total Project Trips		16	16	32	20	24	44

⁽¹⁾ ITE Land Use Code 252 (Senior Adult Housing - Attached), based on 71 dwelling units.

As shown in Table 2, the proposed senior living residential redevelopment is estimated to result in approximately 32 new vehicle trips (16 entering vehicles and 16 exiting vehicles) during the weekday morning peak hour and approximately 44 new vehicle trips (20 entering vehicles and 24 exiting vehicles) during the weekday afternoon peak hour. The number of estimated peak hour trips would result in approximately one additional vehicle trip on the adjacent roadways every one to two minutes during the weekday morning and afternoon peak hours.

As outlined previously, the project site is served by both bus and rail transit. It can be expected that a portion of the trips to and from the project site would travel utilizing the existing MBTA transit service, reducing the number of overall site trips. Additionally, a number of services and amenities exist in the immediate area around the site which would be expected to reduce the number of vehicle trips by residents and visitors. The Needham Senior Center, a pharmacy, grocery store, USPS post office, and a number of doctor's offices and banks are located within an approximately ten-minute walking distance from the site.

Due to the building on site being currently vacant, there was no trip generation credit taken as part of the development of the project volumes shown in Table 1. However, for

⁽²⁾ ITE Land Use Code 254 (Assisted Living), based on 96 beds.

comparison, and to demonstrate the lesser impact of the proposed redevelopment, Table 2 provides a summary of the trip generation associated with the previous assisted living community, nursing facility, and medical office estimated using ITE data.

Table 3: Previous Site Trips

		Weekday AM V								
Description	Size	In	Out	Total	In	Out	Total			
Assisted Living ⁽¹⁾	60 Beds	7	4	11	6	10	16			
Nursing Facility ⁽²⁾	142 Beds	17	7	24	10	21	31			
Medical Office ⁽³⁾	<u>11,000 sf</u>	<u>24</u>	<u>7</u>	<u>31</u>	<u>11</u>	<u>28</u>	<u>39</u>			
Total Previous Use Trips		48	18	66	27	59	86			

- (1) ITE Land Use Code 254 (Assisted Living), based on 60 beds.
- (2) ITE Land Use Code 620 (Nursing Home), based on 142 beds.
- (3) ITE Land Use Code 720 (Medical-Dental Office Building) based on 11,000 square feet.

As seen in Table 3, the previous land uses are estimated to have generated nearly twice as many vehicle trips as the proposed senior living residential redevelopment during the weekday morning and weekday afternoon peak hours. The skilled nursing facility of the previous land use required far more employees than the proposed assisted living facility and the previous medical offices would have a higher number of employees and patients/visitors than the proposed independent living portion of the redevelopment. Together, the proposed redevelopment is shown to result in a significant decrease in the number of trips entering and exiting the project site, not just during the peak hours, but over the course of an entire typical day.

The proposed project is estimated to generate approximately 510 vehicle trips daily during a typical weekday while the previous land use is estimated to have generated approximately 925 vehicle trips per typical weekday. This reduced number of vehicle trips accessing the project site would also be expected to reduce the demands on parking and capacity of the adjacent roadways and intersections.

Project Trip Distribution and Assignment

The additional traffic estimated to be generated by the proposed redevelopment was distributed onto the study area roadways and intersections based on the existing travel patterns of the adjacent roadways. Vehicle trips accessing the project site were assigned to the site driveways based on ease of access to and from the roadway network. The resulting arrival and departure patterns are presented in Figure 6 and are documented in the traffic projection model found in Appendix D.

The project-related traffic was then assigned to the surrounding roadway network based on the project trip distribution patterns presented in Figure 6. The resulting distributed new project trips are shown in Figure 7 and Figure 8 for the weekday morning and weekday afternoon peak hours, respectively.

2026 Build Traffic Volumes

To establish the 2026 Build peak hour traffic volumes, the distributed new project trips were then added to the 2026 No Build peak hour traffic volumes to reflect the 2026 Build peak hour traffic volumes. The resulting 2026 Build weekday morning and afternoon peak hour traffic volumes are presented in Figure 9 and Figure 10, respectively, and are documented in the traffic projection model presented in Appendix D of this report.

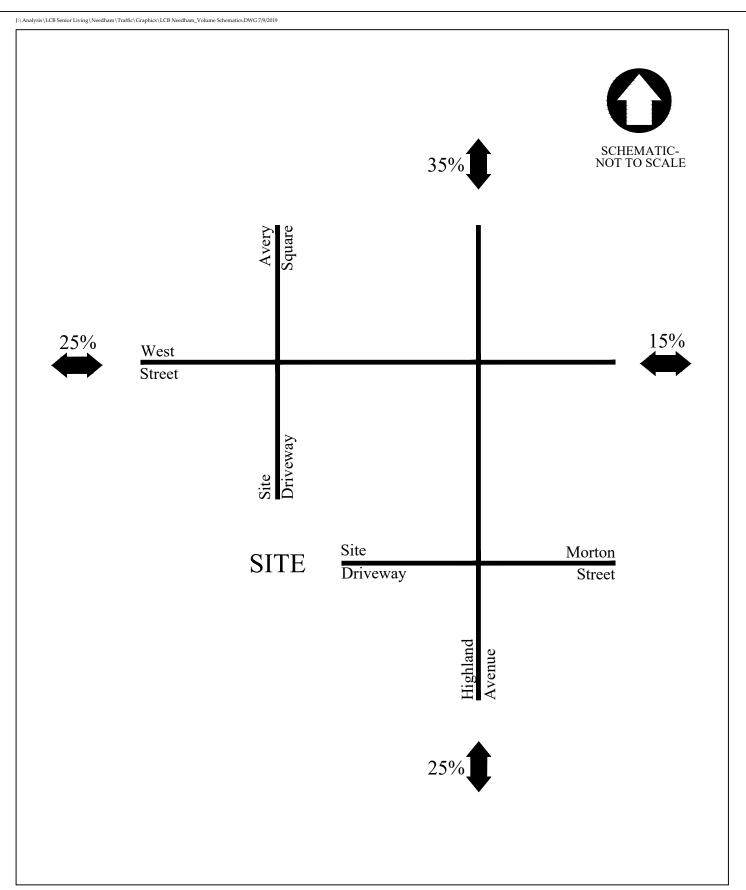


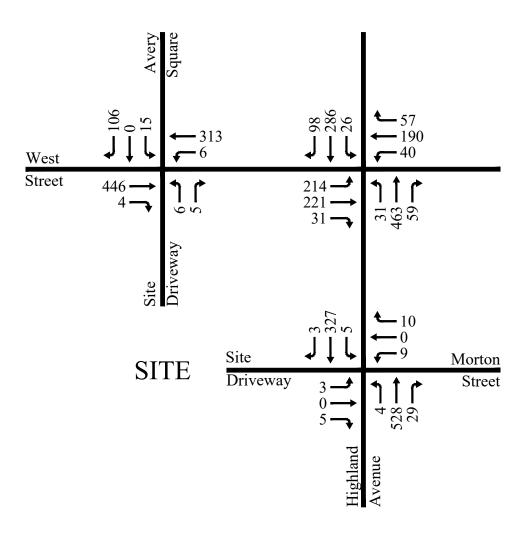


Figure 6
Directions of Arrival and Departure
Peak Hour Traffic Volumes
Senior Living Residential Redevelopment
Needham, Massachusetts



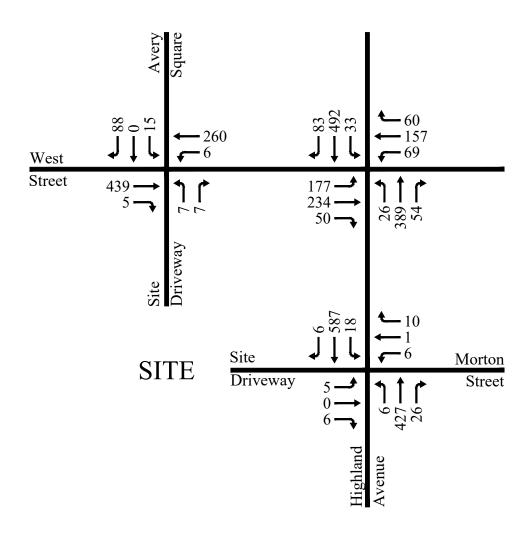














TRAFFIC OPERATIONS ANALYSIS

In previous sections of this report, the quantity of traffic at the study area intersections has been discussed. This section describes the overall quality of the traffic flow at the study area intersections during the weekday morning and weekday afternoon peak hours. As a basis for this assessment, intersection capacity analysis was conducted using the Synchro capacity analysis software at the study area intersections under the 2019 Existing, 2026 No Build and 2026 Build peak hour traffic conditions. The analysis is based on Synchro capacity analysis methodologies and procedures contained in the *Highway Capacity Manual*, 6th Edition (HCM), which is summarized in Appendix E. A discussion of the evaluation criteria and a summary of the results of the capacity analysis are presented below.

Level-of-Service Criteria

Average total vehicle delay is reported as level-of-service (LOS) on a scale of A to F. LOS A represents delays of 10 seconds or less and LOS F represents delays in excess of 50 seconds for unsignalized intersections and greater than 80 seconds for signalized intersections. A more detailed description of the LOS criteria is provided in Appendix E.

Capacity Analysis Results

Intersection capacity analysis was conducted using Synchro capacity analysis software for the study area intersections to evaluate the 2019 Existing, 2026 No Build and 2026 Build traffic conditions during the weekday morning and weekday afternoon peak hours. As mentioned previously, the peak hour traffic volumes utilized as part of this analysis are provided in the traffic projection model, attached in Appendix D of this report.

The Synchro capacity analysis results for the 2019 Existing, 2026 No Build and 2026 Build traffic conditions are presented in Appendix F, Appendix G, and Appendix H, respectively. The overall results of the intersection capacity analysis for the signalized intersection of West Street at Highland Avenue are presented in Table 4 below, and the results for the critical approach at each of the unsignalized study area intersections are presented in Table 5. A more detailed summary of the capacity analysis for each study area intersection is provided in Appendix I. The results of the specific capacity analysis at the study area intersections are discussed below.

As stated previously, the study area intersections that were counted and analyzed during the weekday peak hours under the 2019 existing conditions do not include the site in operation under its previous land use. Therefore, the analysis summarized below does not reflect the operations that would have been associated with the previously operational site.

Table 4: Signalized Intersection Capacity Analysis

	Peak	20	19 Existi	ng	202	6 No B	uild	2026 Build				
Intersection	Perio	LOS ⁽¹⁾	Delay ⁽²⁾	$V/C^{(3)}$	LOS	Delay	V/C	LOS	Delay	V/C		
West Street at	AM	D	41.7	0.70	D	45.7	0.75	D	46.1	0.75		
Highland Avenu	ıe PM	D	40.3	0.71	D	45.4	0.75	D	45.8	0.76		

- (1) Level-of-Service
- (2) Average vehicle delay in seconds
- (3) Volume to capacity ratio

As shown in Table 4, the signalized intersection of West Street at Highland Avenue is shown to currently operate at overall LOS D during the weekday morning and weekday afternoon peak hours. Under future conditions, with and without the proposed project in place, the intersection is shown to continue to operate at overall LOS D during both peak hours. All movements at the intersection are projected to operate at the same LOS under 2026 No Build and 2026 Build conditions indicating limited impact on traffic operations due to the proposed redevelopment.

Table 5: Unsignalized Intersection Capacity Analysis

			Peak	20	19 Existi	ng	2020	6 No B	uild	2026 Build			
Intersection	Mov	ement	Period	LOS ⁽¹⁾	Delay ⁽²⁾	$V/C^{(3)}$	LOS	Delay	V/C	LOS	Delay	V/C	
West Street at	NB	LR	AM	С	21.7	0.02	С	23.9	0.02	С	18.8	0.04	
Site Driveway/			PM	C	19.5	0.02	C	21.2	0.02	C	17.1	0.05	
Avery Square	SB	LTR	AM	В	13.1	0.25	В	13.9	0.29	В	14.0	0.29	
			PM	В	12.2	0.19	В	12.7	0.21	В	12.9	0.22	
Highland Avenue	EB	LTR ⁽⁴⁾	AM	В	10.2	0.01	В	10.4	0.01	C	16.1	0.03	
at Site Driveway/			PM	A	0.0	0.00	A	0.0	0.00	C	23.3	0.06	
Morton Street	WB	LTR	AM	C	18.0	0.08	C	19.7	0.10	C	19.9	0.10	
			PM	C	19.9	0.09	C	21.4	0.10	C	22.1	0.10	

- (1) Level-of-Service
- (2) Average vehicle delay in seconds
- (3) Volume to capacity ratio
- (4) Change in LOS from No Build to Build due to the current vacant condition of the project site

As shown in Table 5, the northbound site driveway approach to West Street is shown to currently operate at LOS C during the weekday morning and weekday afternoon peak hours. Under 2026 No Build and 2026 Build conditions, the site driveway approach is projected to continue to operate at LOS C during both peak hours analyzed. The southbound Avery Square approach is shown to currently operate at LOS B during the weekday morning and afternoon peak hours, and is projected to continue to operate at LOS B under future conditions, with or without the proposed project in place.

At the site driveway opposite Morton Street on Highland Avenue, the stop-controlled westbound Morton Street approach is shown to currently operate at LOS C during the weekday morning and weekday afternoon peak hours. Under future conditions with or without the proposed project in place, the Morton Street westbound approach is projected to continue to operate at LOS C during both peak hours with a negligible amount of additional average vehicle delay. Under 20206 Build conditions, the site driveway on Highland Avenue is projected to operate at LOS C during both the weekday morning and weekday afternoon peak hours.

Site-Generated Parking Demand

The senior living residential redevelopment proposes to include a total of 148 parking spaces on-site, including 34 interior garage spaces and 114 exterior spaces. Ten of the interior garage spaces would be tandem spaces for individuals living in the independent living units that may have two cars.

In order to determine the projected parking demand for the senior living residential redevelopment, parking generation data from the ITE publication, *Parking Generation Manual*, *5th Edition* was referenced. The *Parking Generation Manual* provides parking generation information for various land uses compiled from studies conducted by members nationwide. Weekday parking demand estimates for the proposed redevelopment were developed based on data presented in this publication for Land Use Codes 252 (Senior Adult Housing – Attached) and 254 (Assisted Living), and are presented in Table 6 below.

Table 6: Proposed Site Parking Generation

		Weekday Peak
Description	Size	Parking Demand
Senior Adult Housing ⁽¹⁾	71 Dwelling Units	43
Assisted Living ⁽²⁾	<u>96 Beds</u>	<u>37</u>
Total Estimated Parking Demand		80

⁽¹⁾ ITE Land Use Code 252 (Senior Adult Housing - Attached), based on 71 dwelling units.

As shown in Table 6, the proposed senior living residential redevelopment is projected to generate an average peak parking demand of 80 vehicles during a typical weekday based on ITE data. The project proposes to include 148 parking spaces: 34 interior garage spaces and 114 exterior spaces. Comparing the projected parking demand to the proposed parking supply shows that the site would have a peak period utilization rate of approximately 54%.

The *Parking Generation Manual* also provides information indicating how much parking is supplied at each of the studies included in the analysis. For senior adult attached housing, an average parking supply ratio of 0.9 parking spaces per independent senior housing unit was

⁽²⁾ ITE Land Use Code 254 (Assisted Living), based on 96 beds.

identified. For an assisted living site that is located within a half mile of rail transit, an average parking supply ratio of 0.4 parking spaces per unit was identified. Using these average supply ratios provided by ITE, the number of parking spaces that would be supplied for a project similar in size and type to the proposed site would be approximately 98 parking spaces. The proposed project is providing 50 additional parking spaces than the parking supplies calculated based on ITE.

The zoning proposal for this project would include the following parking supply requirements:

- 0.5 parking spaces per bed for the assisted living community (96 beds proposed)
- 1 parking space for every two employees on the largest shift of the assisted living community (58 employees on the large shift)
- 1 parking space per unit of independent living (71 units proposed)

Based on a review of the data presented within the *Parking Generation Manual* for independent living, the proposed supply requirement of 1 parking space per independent dwelling unit is considered to be conservative. As identified previously, data from the *Parking Generation Manual* for independent senior living suggests that facilities where data was collected provided a parking supply ratio of 0.9 spaces per independent dwelling unit. Within the Town of Needham's Elder Services Zoning District, the parking supply requirement is 0.5 parking spaces per independent living dwelling unit.

Based on the proposed parking supply rates and the proposed build program, the zoning proposal would require 148 parking spaces and the project proposes to include 148 parking spaces.

Although the proposed project is shown to provide sufficient on-site parking to meet the anticipated average peak parking demands of the proposed senior living residential redevelopment, there are other sources of parking that could further increase the number of spaces available to residents, employees, and visitors of the site. As allowed by Section 5.1.1.7 of the Town of Needham zoning by-laws, the former site included the use of an additional 20 on-street spaces (on Highland Avenue) that are connected to the project site and could theoretically be included as part of the overall parking supply ratio for the redevelopment project. Additionally, there is a variety of on-street parking that could be used by visitors in close proximity to the project site which would further reduce the need for additional parking spaces to be supplied on site.

The previous land uses are shown to require more parking than the proposed project. Table 7, below, provides a summary of the estimated parking demand associated with the previous uses on the site, which included assisted living, a skilled nursing facility, and medical office land uses.

Table 7: Previous Site Parking Demand

		Weekday Peak
Description	Size	Parking Demand
Assisted Living ⁽¹⁾	60 Beds	26
Nursing Facility ⁽²⁾	142 Beds	52
Medical Office ⁽³⁾	<u>11,000 sf</u>	<u>32</u>
Total Estimated Parking Demand		110

- (1) ITE Land Use Code 254 (Assisted Living), based on 60 beds.
- (2) ITE Land Use Code 620 (Nursing Home), based on 142 beds.
- (3) ITE Land Use Code 720 (Medical-Dental Office Building) based on 11,000 square feet.

As shown, the previous land uses are estimated to have had a peak weekday parking demand of approximately 110 vehicles which is 30 more parking spaces than the parking demand of the proposed senior living residential redevelopment.

Based on the parking review above, the proposed project is expected to provide a parking supply that exceeds the peak demand of the proposed assisted living and independent living uses on site. The analysis also shows that the proposed project is estimated to have a lesser parking demand than the previous land uses on site. The reduced parking demand of the redevelopment compared to the previous land uses may also reduce the need for on-street parking within the study area.

Site Access and Circulation

Access to the project site is proposed to continue to be provided by two full-access driveways, one located on West Street opposite Avery Square, and one located on Highland Avenue opposite Morton Street. The proposed site driveways would not be significantly modified as part of the project and therefore, the safety and operations at the driveways are not expected to be impacted. The driveways are estimated to experience less traffic volume than the previously occupied site, further reducing potential operational issues associated with the site driveways.

Sight Distance

A field review of the available sight distance was conducted at the site driveways on West Street and Highland Avenue. The American Association of State Highway and Transportation Officials (AASHTO) publication, *A Policy on Geometric Design*, 2018 Edition, defines minimum and recommended sight distances at intersections. The minimum sight distance is based on the required stopping sight distance (SSD) for vehicles traveling along the main road. According to AASHTO, "If the available sight distance for an entering or

crossing vehicle is at least equal to the appropriate stopping sight distance for the major road, then drivers have sufficient time to anticipate and avoid collisions."

In order to accurately assess required sight distance on West Street, a speed study of vehicles at free flow speeds was performed on West Street near the project site. The recorded speeds were reviewed and the 85th percentile speeds were determined to be 24 mph in the eastbound direction and 23 mph in the westbound direction. Because the measured speeds are lower than the posted advisory speed limits on West Street, in order to present a conservative analysis, the posted speed limits of 25 mph in the eastbound direction and 30 mph in the westbound direction were utilized to determine the required sight distance at the site driveway on West Street. For the site driveway on Highland Avenue, the 85th percentile speeds measured from the ATR counts were 32 mph in the northbound direction and 34 mph in the southbound direction and were utilized accordingly for the sight distance review.

Table 8 summarizes the AASHTO sight distance standards for the posted speeds on West Street, the 85th percentile speeds on Highland Avenue, and the available sight distance measured at each driveway.

		Speed	85th %		Sight	Meets
Site Driveway		Limit	Speed	SSD ⁽¹⁾	Distance	Required
Location	Looking	(mph)	(mph)	Required	Measured	SSD?
West Street	Left (West)	25	24	155	210	Yes
	Right (East)	30	23	200	500+	Yes
Highland Avenue	Left (North)	30	34	240	150	No

Table 8: Sight Distance Requirements

25

Right (South)

32

220

Yes

As shown in Table 8, the available sight distance for vehicles exiting the site onto West Street looking left towards the west was measured to be approximately 210 feet which exceeds the required AASHTO sight distances for the 30 mph advisory speed limit. At the West Street site driveway looking right towards the east, available sight distance was measured at more than 500 feet down West Street, which exceeds the required and recommended AASHTO sight distances for the 25-mph advisory speed limit. Additional sight lines are available toward vehicles turning from Highland Avenue who would be expected to travel at slower rates of speed.

⁽¹⁾ AASHTO stopping sight distance (see AASHTO equations 3-2 and 3-3) equations for the speed limits or 85th percentile speeds.

⁽²⁾ AASHTO intersection sight distance (see AASHTO equations 9-1 and 9-2) equations for the speed limits or 85th percentile speeds.

At the site driveway on Highland, the available sight distance for vehicles exiting the site looking left towards the north was observed to be restricted to approximately 150 feet due to existing on-street parking on the west side of Highland Avenue. The project is not proposing any site changes which would be expected to diminish sight lines more than the existing condition. The available sight distance would not meet the required AASHTO sight distance for the measured 85th percentile speed of 34 mph in the southbound direction. However, it is expected that vehicles exiting the site driveway would exit in two stages, first crossing the sidewalk then turning onto Highland Avenue. As such, sight distance at the site driveway was measured at a point approximately seven feet from the edge of Highland Avenue. The sight distance looking to the left from this point was measured to be approximately 400 feet, which exceeds the AASHTO sight distance for the measured 85th percentile speed of 34 mph in the southbound direction. At the Highland Avenue site driveway looking right towards the south, available sight distance was measured at more than 500 feet, which exceeds the required AASHTO sight distances for the measured 85th percentile speed of 32 mph in the northbound direction.

CONCLUSION

The proposed project includes the redevelopment of the current vacant building at 100-110 West Street in Needham, MA into a senior living residential redevelopment consisting of 83 units of senior assisted living and 71 units of independent senior. Access to the site would continue to be provided via existing full-access driveways on West Street and Highland Avenue.

Based on the analysis presented in this assessment, the proposed project is estimated to generate approximately 32 new vehicle trips (16 entering vehicles and 16 exiting vehicles) during the weekday morning peak hour and approximately 52 new vehicle trips (26 entering vehicles and 26 exiting vehicles) during the weekday afternoon peak hour compared to the existing vacant site. The trip generation of the proposed redevelopment is shown to be significantly less than that of the previous land uses during the weekday peak hours and over the course of a typical work day.

The capacity analysis indicates that the proposed senior living residential redevelopment is projected to have a negligible impact on the operations of the roadway network adjacent to the site. The signalized intersection of West Street at Highland Avenue is projected to operate at overall LOS D during the weekday morning and weekday afternoon peak hours under 2026 future conditions with or without the proposed project in place. The intersection is shown to experience an increase of less than a half second of overall average vehicle delay during the analyzed peak hours as a result of the project. The project is projected to result in a negligible increase in delay on the stop-controlled Avery Square and Morton Street approaches opposite the site driveways. During both the weekday morning and weekday afternoon peak hours, the exiting movements from the site driveway on West Street are projected to operate at LOS B and the exiting movements from the site driveway on Highland Avenue are projected to operate at LOS C.

Available sight distances at the site driveway on West Street exceed required sight distances. Although the project is not proposing changes to the site access, sight distance looking north from the site driveway on Highland Avenue does not currently meet sight distance requirements. However, available sight lines are expected to provide safe access to the site via two-stage exiting, where a driver can assess the safety of turning onto Highland Avenue by moving closer to the roadway before making a turning decision from a distance closer to Highland Avenue than the AASHTO standard distance. With two-stage exiting, available sight distance looking north along Highland Avenue would exceed that required by AASHTO standards.

Based on the parking supply requirements included in the zoning proposal for the project would, the proposed project would require 148 parking spaces. A review of estimated parking demand shows that the proposed parking supply requirements and the proposed on-site parking supply of 148 spaces is expected to exceed the typical peak parking demand

of 80 spaces associated with the proposed redevelopment. The reduced parking demand of the redevelopment compared to the previous land uses may also reduce the need for onstreet parking within the study area.

Based on a review of the analysis contained within this traffic impact study, the proposed senior living residential redevelopment is not shown to have a significant impact on the overall traffic operations of the study area intersections and roadways.



Appendix for Traffic Impact Study

Senior Living Residential Redevelopment

100-110 West Street Needham, MA



Prepared by

McMahon Associates, Inc.
120 Water Street, 4th Floor
Boston, MA 02109
617.556.0020

Prepared for LCB Senior Living

April 2020

APPENDIX A

Turning Movement Counts



N/S: Highland Avenue

E/W: Morton Street/Hildreth Place

City, State: Needham, MA Client: LCB Senior Living

File Name : Highland at Morton-Hildreth AM Site Code : 12051901

Start Date : 12/5/2019

Page No : 1

Groups Printed- Cars - Heavy Vehicles - Bikes by Direction

		High	land A	venue			Mo	rton S		cuty ter	Highland Avenue Hildreth Place]			
		Fı	om No	orth			F	rom E	ast			Fr	om So	uth			Fr	om W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	50	2	0	52	2	0	0	1	3	0	70	0	0	70	0	0	0	0	0	125
07:15 AM	0	83	0	0	83	1	0	0	1	2	1	90	0	0	91	0	0	0	0	0	176
07:30 AM	0	85	0	0	85	3	0	1	1	5	1	116	0	0	117	0	0	0	4	4	211
07:45 AM	0	71	1	0	72	1	0	5	0	6	10	149	0	0	159	1	0	0	3	4	241
Total	0	289	3	0	292	7	0	6	3	16	12	425	0	0	437	1	0	0	7	8	753
																•					
08:00 AM	0	82	1	0	83	3	0	2	0	5	7	122	0	0	129	0	0	0	1	1	218
08:15 AM	0	65	1	0	66	4	0	0	2	6	4	99	0	0	103	0	0	0	0	0	175
08:30 AM	0	73	2	0	75	1	0	1	1	3	5	102	0	0	107	0	0	0	0	0	185
08:45 AM	0	68	1	0	69	1	0	1	0	2	2	116	1	0	119	0	0	0	0	0	190
Total	0	288	5	0	293	9	0	4	3	16	18	439	1	0	458	0	0	0	1	1	768
Grand Total	0	577	8	0	585	16	0	10	6	32	30	864	1	0	895	1	0	0	8	9	1521
Apprch %	0	98.6	1.4	0		50	0	31.2	18.8		3.4	96.5	0.1	0		11.1	0	0	88.9		
Total %	0	37.9	0.5	0	38.5	1.1	0	0.7	0.4	2.1	2	56.8	0.1	0	58.8	0.1	0	0	0.5	0.6	
Cars	0	541	7	0	548	15	0	10	0	25	29	830	1	0	860	1	0	0	0	1	1434
% Cars	0	93.8	87.5	0	93.7	93.8	0	100	0	78.1	96.7	96.1	100	0	96.1	100	0	0	0	11.1	94.3
Heavy Vehicles																					
% Heavy Vehicles	0	6.2	12.5	0	6.3	6.2	0	0	66.7	15.6	3.3	3.9	0	0	3.9	0	0	0	25	22.2	5.2
Bikes by Direction	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	6	6	8
% Bikes by Direction	0	0	0	0	0	0	0	0	33.3	6.2	0	0	0	0	0	0	0	0	75	66.7	0.5



N/S: Highland Avenue

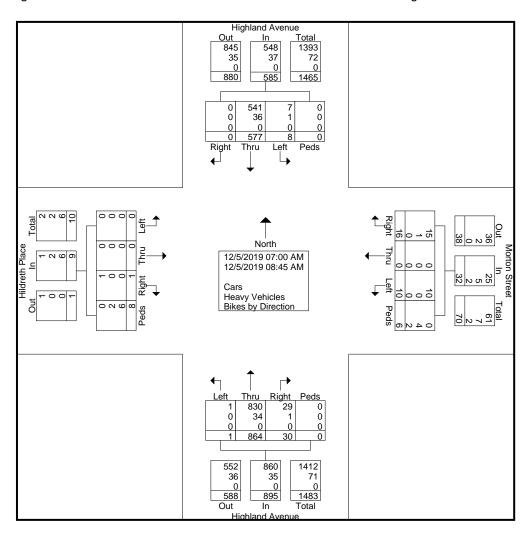
E/W: Morton Street/Hildreth Place

City, State: Needham, MA Client: LCB Senior Living

File Name: Highland at Morton-Hildreth AM

Site Code : 12051901 Start Date : 12/5/2019

Page No : 2



		Highland Avenue					Mo	rton S	treet			Highland Avenue Hildreth Place									
		Fr	om No	rth			From East					From South				From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for	Entire 1	Intersec	tion Be	gins at	07:15 AN	1															
07:15 AM	0	83	0	0	83	1	0	0	1	2	1	90	0	0	91	0	0	0	0	0	176
07:30 AM	0	85	0	0	85	3	0	1	1	5	1	116	0	0	117	0	0	0	4	4	211
07:45 AM	0	71	1					5		6	10	149			159	1				ļ	241
08:00 AM	0	82	1	0	83	3	0	2	0	5	7	122	0	0	129	0	0	0	1	1	218
Total Volume	0	321	2	0	323	8	0	8	2	18	19	477	0	0	496	1	0	0	8	9	846
% App. Total	0	99.4	0.6	0		44.4	0	44.4	11.1		3.8	96.2	0	0		11.1	0	0	88.9		
PHF	.000	.944	.500	.000	.950	.667	.000	.400	.500	.750	.475	.800	.000	.000	.780	.250	.000	.000	.500	.563	.878



N/S: Highland Avenue

E/W: Morton Street/Hildreth Place

City, State: Needham, MA Client: LCB Senior Living

File Name : Highland at Morton-Hildreth AM Site Code : 12051901

Start Date : 12/5/2019

Page No : 1

Groups Printed- Cars

		High	land A	vonuo		Morton Street							and A	zonijo			1				
		0	om No					rom E				- 0	om Soi					ireth P com W			
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	45	1	0	46	2	0	0	0	2	0	65	0	0	65	0	0	0	0	0	113
07:15 AM	0	78	0	0	78	1	0	0	0	1	1	83	0	0	84	0	0	0	0	0	163
07:30 AM	0	77	0	0	77	3	0	1	0	4	1	113	0	0	114	0	0	0	0	0	195
07:45 AM	0	70	1	0	71	1	0	5	0	6	10	145	0	0	155	1	0	0	0	1	233
Total	0	270	2	0	272	7	0	6	0	13	12	406	0	0	418	1	0	0	0	1	704
08:00 AM	0	79	1	0	80	3	0	2	0	5	7	117	0	0	124	0	0	0	0	0	209
08:15 AM	0	62	1	0	63	3	0	0	0	3	4	96	0	0	100	0	0	0	0	0	166
08:30 AM	0	69	2	0	71	1	0	1	0	2	5	98	0	0	103	0	0	0	0	0	176
08:45 AM	0	61	1	0	62	1	0	1	0	2	1	113	1	0	115	0	0	0	0	0	179
Total	0	271	5	0	276	8	0	4	0	12	17	424	1	0	442	0	0	0	0	0	730
Grand Total	0	541	7	0	548	15	0	10	0	25	29	830	1	0	860	1	0	0	0	1	1434
Apprch %	0	98.7	1.3	0		60	0	40	0		3.4	96.5	0.1	0		100	0	0	0		
Total %	0	37.7	0.5	0	38.2	1	0	0.7	0	1.7	2	57.9	0.1	0	60	0.1	0	0	0	0.1	

		0	and Av			Morton Street From East						Highland Avenue From South						Hildreth Place From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thr u	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total		
Peak Hour Ana	alysis F	rom 07:	00 AM	to 08:4	45 AM - F	Peak 1 c	of 1																
Peak Hour for	Entire I	ntersec	tion Be	gins at	07:30 AM	1																	
07:30 AM	0	77	0	0	77	3	0	1	0	4	1	113	0	0	114	0	0	0	0	0	195		
07:45 AM	0	70	1					5		6	10	145			155	1				1	233		
08:00 AM	0	79	1	0	80	3	0	2	0	5	7	117	0	0	124	0	0	0	0	0	209		
08:15 AM	0	62	1	0	63	3	0	0	0	3	4	96	0	0	100	0	0	0	0	0	166		
Total Volume	0	288	3	0	291	10	0	8	0	18	22	471	0	0	493	1	0	0	0	1	803		
% App. Total	0	99	1	0		55.6	0	44.4	0		4.5	95.5	0	0		100	0	0	0				
PHF	.000	.911	.750	.000	.909	.833	.000	.400	.000	.750	.550	.812	.000	.000	.795	.250	.000	.000	.000	.250	.862		



N/S: Highland Avenue

E/W: Morton Street/Hildreth Place

City, State: Needham, MA Client: LCB Senior Living

File Name : Highland at Morton-Hildreth AM Site Code : 12051901

Start Date : 12/5/2019

Page No : 1

Groups Printed- Heavy Vehicles

		TT. 1								iiicu- iic	,,,,,						1				
		High	land A	venue			Mo	rton St	treet			Highi	and A	venue			Hile	lreth P	lace		
		Fı	om No	rth			F	rom E	ast			Fr	om Sou	uth			Fı	rom W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	5	1	0	6	0	0	0	1	1	0	5	0	0	5	0	0	0	0	0	12
07:15 AM	0	5	0	0	5	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	12
07:30 AM	0	8	0	0	8	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	11
07:45 AM	0	1	0	0	1	0	0	0	0	0	0	4	0	0	4	0	0	0	1	1	6
Total	0	19	1	0	20	0	0	0	1	1	0	19	0	0	19	0	0	0	1	1	41
08:00 AM	0	3	0	0	3	0	0	0	0	0	0	5	0	0	5	0	0	0	1	1	9
08:15 AM	0	3	0	0	3	1	0	0	2	3	0	3	0	0	3	0	0	0	0	0	9
08:30 AM	0	4	0	0	4	0	0	0	1	1	0	4	0	0	4	0	0	0	0	0	9
08:45 AM	0	7	0	0	7	0	0	0	0	0	1	3	0	0	4	0	0	0	0	0	11
Total	0	17	0	0	17	1	0	0	3	4	1	15	0	0	16	0	0	0	1	1	38
Grand Total	0	36	1	0	37	1	0	0	4	5	1	34	0	0	35	0	0	0	2	2	79
Apprch %	0	97.3	2.7	0		20	0	0	80		2.9	97.1	0	0		0	0	0	100		
Total %	0	45.6	1.3	0	46.8	1.3	0	0	5.1	6.3	1.3	43	0	0	44.3	0	0	0	2.5	2.5	

		0	and Av			Morton Street From East						Highland Avenue From South						Hildreth Place From West						
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thr u	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total			
Peak Hour Ana	alysis F	rom 07:	00 AM	to 08:4	45 AM - F	Peak 1 c	of 1																	
Peak Hour for	Entire I	ntersec	tion Be	gins at	07:00 AM	1																		
07:00 AM	0	5	1	_					1	1	0	5	0	0	5	0	0	0	0	0	12			
07:15 AM	0	5	0	0	5	0	0	0	0	0	0	7			7	0	0	0	0	0	12			
07:30 AM	0	8	0	0	8	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	11			
07:45 AM	0	1	0	0	1	0	0	0	0	0	0	4	0	0	4	0	0	0	1	1	6			
Total Volume	0	19	1	0	20	0	0	0	1	1	0	19	0	0	19	0	0	0	1	1	41			
% App. Total	0	95	5	0		0	0	0	100		0	100	0	0		0	0	0	100					
PHF	.000	.594	.250	.000	.625	.000	.000	.000	.250	.250	.000	.679	.000	.000	.679	.000	.000	.000	.250	.250	.854			



N/S: Highland Avenue E/W: Morton Street/Hildreth Place City, State: Needham, MA Client: LCB Senior Living

File Name : Highland at Morton-Hildreth AM Site Code : 12051901

Start Date : 12/5/2019

Page No : 1

Groups Printed- Bikes by Direction

	Highland Avenue Morton Street Highland Avenue Hildreth Place																				
		Highl	and A	venue			Moi	rton St	treet			Highl	and A	venue			Hild	lreth P	lace		
		Fr	om No	rth			Fı	rom Ea	ast			Fr	om Sou	uth			Fı	om W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1
07:30 AM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	4	4	5
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2
Total	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	6	6	8
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	6	6	8
Apprch %	0	0	0	0		0	0	0	100		0	0	0	0		0	0	0	100		
Total %	0	0	0	0	0	0	0	0	25	25	0	0	0	0	0	0	0	0	75	75	

		0	and A			Morton Street From East						Highland Avenue From South						Hildreth Place From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thr u	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total		
Peak Hour Ana	alysis F	rom 07:	00 AM	to 08:4	5 AM - I	Peak 1 c	of 1												•	•			
Peak Hour for	Entire I	ntersect	tion Be	gins at (07:00 AN	M																	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
07:15 AM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1		
07:30 AM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	4	4	5		
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2		
Total Volume	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	6	6	8		
% App. Total	0	0	0	0		0	0	0	100		0	0	0	0		0	0	0	100				
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.500	.500	.000	.000	.000	.000	.000	.000	.000	.000	.375	.375	.400		



N/S: Highland Avenue E/W: Morton Street/Hildreth Place

City, State: Needham, MA Client: LCB Senior Living

File Name : Highland at Morton-Hildreth PM Site Code : 12041900

Start Date : 12/4/2019

Page No : 1

Groups Printed- Cars - Heavy Vehicles - Bikes by Direction

		High	land A	venue			Mo	rton S	treet			High	land A	venue			Hild	lreth P	lace		
		Fı	rom No	rth			F	rom E	ast			Fr	om So	uth			Fr	om W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	109	1	0	110	1	0	2	1	4	0	98	0	0	98	1	0	0	3	4	216
04:15 PM	0	118	1	0	119	3	0	3	13	19	5	97	0	0	102	0	0	0	3	3	243
04:30 PM	1	112	4	0	117	3	0	0	12	15	6	117	0	0	123	0	0	0	1	1	256
04:45 PM	0	139	4	3	146	4	1_	2	3	10	5	91	0	0	96	0	0	0	2	2	254
Total	1	478	10	3	492	11	1	7	29	48	16	403	0	0	419	1	0	0	9	10	969
																ı					ı
05:00 PM	1	145	7	1	154	1	0	4	0	5	8	85	0	0	93	0	0	0	1	1	253
05:15 PM	0	130	1	0	131	1	0	0	1	2	4	86	1	0	91	0	0	0	1	1	225
05:30 PM	0	137	2	0	139	1	0	3	0	4	4	85	0	0	89	0	0	0	0	0	232
05:45 PM	0	116	4	5	125	0	2	3	3	8	5	85	1	2	93	0	0	0	3	3	229
Total	1	528	14	6	549	3	2	10	4	19	21	341	2	2	366	0	0	0	5	5	939
Grand Total	2	1006	24	9	1041	14	3	17	33	67	37	744	2	2	785	1	0	0	14	15	1908
Apprch %	0.2	96.6	2.3	0.9		20.9	4.5	25.4	49.3		4.7	94.8	0.3	0.3		6.7	0	0	93.3		
Total %	0.1	52.7	1.3	0.5	54.6	0.7	0.2	0.9	1.7	3.5	1.9	39	0.1	0.1	41.1	0.1	0	0	0.7	0.8	
Cars	2	993	22	0	1017	14	2	17	0	33	35	736	2	0	773	1	0	0	0	1	1824
% Cars	100	98.7	91.7	0	97.7	100	66.7	100	0	49.3	94.6	98.9	100	0	98.5	100	0	0	0	6.7	95.6
Heavy Vehicles	0	13	2	7	22	0	1	0	16	17	2	8	0	0	10	0	0	0	9	9	58
% Heavy Vehicles	0	1.3	8.3	77.8	2.1	0	33.3	0	48.5	25.4	5.4	1.1	0	0	1.3	0	0	0	64.3	60	3
Bikes by Direction	0	0	0	2	2	0	0	0	17	17	0	0	0	2	2	0	0	0	5	5	26
% Bikes by Direction	0	0	0	22.2	0.2	0	0	0	51.5	25.4	0	0	0	100	0.3	0	0	0	35.7	33.3	1.4



N/S: Highland Avenue

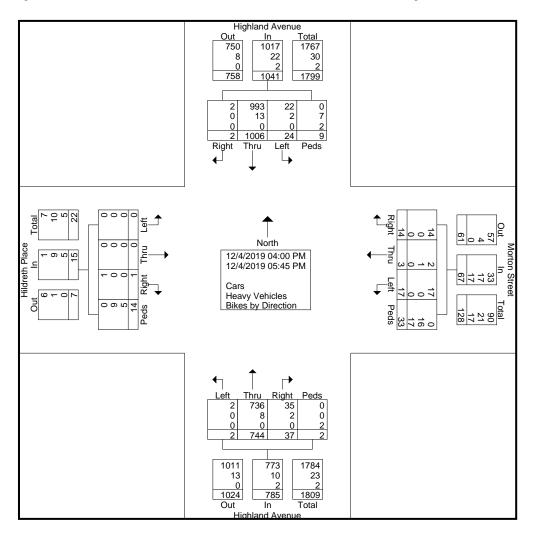
E/W: Morton Street/Hildreth Place

City, State: Needham, MA Client: LCB Senior Living

File Name: Highland at Morton-Hildreth PM

Site Code : 12041900 Start Date : 12/4/2019

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		Highl	land A	venue			Mo	rton St	treet			High	land A	venue			Hilo	lreth P	lace		
		Fr	om No	rth			F	rom E	ast			Fr	om So	uth			Fr	om W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour An	alysis F	rom 04	:00 PM	to 05:4	5 PM - P	eak 1 o	f 1														
Peak Hour for	Entire 1	Intersec	tion Be	gins at	04:15 PM	1															
04:15 PM	0	118	1	0	119	3	0	3	13	19	5	97	0	0	102	0	0	0	3	3	243
04:30 PM	1											117			123	0	0	0	1	1	256
04:45 PM	0	139	4	3		4	1														İ
05:00 PM	1	145	7	1	154	1	0	4	0	5	8	85	0	0	93	0	0	0	1	1	253
Total Volume	2	514	16	4	536	11	1	9	28	49	24	390	0	0	414	0	0	0	7	7	1006
% App. Total	0.4	95.9	3	0.7		22.4	2	18.4	57.1		5.8	94.2	0	0		0	0	0	100		
PHF	.500	.886	.571	.333	.870	.688	.250	.563	.538	.645	.750	.833	.000	.000	.841	.000	.000	.000	.583	.583	.982



N/S: Highland Avenue E/W: Morton Street/Hildreth Place

City, State: Needham, MA Client: LCB Senior Living

File Name : Highland at Morton-Hildreth PM Site Code : 12041900

Start Date : 12/4/2019

Page No : 1

Groups Printed- Cars

		TT. 1								psiime							****				1
		High	land A	venue			Mo	rton St	treet			Highi	and A	venue			Hile	dreth P	lace		
		Fı	rom No	rth			F	rom E	ast			Fr	om Sou	uth			Fı	rom W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	107	1	0	108	1	0	2	0	3	0	97	0	0	97	1	0	0	0	1	209
04:15 PM	0	116	1	0	117	3	0	3	0	6	5	95	0	0	100	0	0	0	0	0	223
04:30 PM	1	112	4	0	117	3	0	0	0	3	6	115	0	0	121	0	0	0	0	0	241
04:45 PM	0	138	4	0	142	4	1	2	0	7	5	90	0	0	95	0	0	0	0	0	244
Total	1	473	10	0	484	11	1	7	0	19	16	397	0	0	413	1	0	0	0	1	917
05:00 PM	1	142	6	0	149	1	0	4	0	5	8	85	0	0	93	0	0	0	0	0	247
05:15 PM	0	127	1	0	128	1	0	0	0	1	4	86	1	0	91	0	0	0	0	0	220
05:30 PM	0	137	2	0	139	1	0	3	0	4	4	83	0	0	87	0	0	0	0	0	230
05:45 PM	0	114	3	0	117	0	1	3	0	4	3	85	1	0	89	0	0	0	0	0	210
Total	1	520	12	0	533	3	1	10	0	14	19	339	2	0	360	0	0	0	0	0	907
Grand Total	2	993	22	0	1017	14	2	17	0	33	35	736	2	0	773	1	0	0	0	1	1824
Apprch %	0.2	97.6	2.2	0		42.4	6.1	51.5	0		4.5	95.2	0.3	0		100	0	0	0		
Total %	0.1	54.4	1.2	0	55.8	0.8	0.1	0.9	0	1.8	1.9	40.4	0.1	0	42.4	0.1	0	0	0	0.1	

		0	land A					rton St rom Ea				0	land A					reth F			
Start Time	ime Right Thru Left Peds A ur Analysis From 04:00 PM to 05:45 I					Right	Thr u	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Ana	alysis F	rom 04:	:00 PM	to 05:4	5 PM - P	eak 1 of	f 1												•		
Peak Hour for	Entire I	Intersec	tion Be	gins at	04:15 PM	I															
04:15 PM	0	116	1	0	117	3	0	3	0	6	5	95	0	0	100	0	0	0	0	0	223
04:30 PM	1											115			121	0	0	0	0	0	241
04:45 PM	0	138	4	0	142	4	1			7	5	90	0	0	95	0	0	0	0	0	244
05:00 PM	1	142	6		149	1	0	4			8										247
Total Volume	2	508	15	0	525	11	1	9	0	21	24	385	0	0	409	0	0	0	0	0	955
% App. Total	0.4	96.8	2.9	0		52.4	4.8	42.9	0		5.9	94.1	0	0		0	0	0	0		
PHF	.500	.894	.625	.000	.881	.688	.250	.563	.000	.750	.750	.837	.000	.000	.845	.000	.000	.000	.000	.000	.967



N/S: Highland Avenue E/W: Morton Street/Hildreth Place

City, State: Needham, MA Client: LCB Senior Living

File Name : Highland at Morton-Hildreth PM Site Code : 12041900

Start Date : 12/4/2019

Page No : 1

Groups Printed- Heavy Vehicles

		Highl	land A	venue			Mo	rton St	-			Highl	and A	venue			Hile	dreth P	lace		
		Fr	om No	rth			F	rom E	ast			Fr	om So	uth			Fı	rom W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	2	2	5
04:15 PM	0	2	0	0	2	0	0	0	4	4	0	2	0	0	2	0	0	0	3	3	11
04:30 PM	0	0	0	0	0	0	0	0	7	7	0	2	0	0	2	0	0	0	0	0	9
04:45 PM	0	1	0	2	3	0	0	0	2	2	0	1	0	0	1	0	0	0	1	1	7_
Total	0	5	0	2	7	0	0	0	13	13	0	6	0	0	6	0	0	0	6	6	32
05:00 PM	0	3	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
05:15 PM	0	3	0	0	3	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	5
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
05:45 PM	0	2	1	5	8	0	1	0	2	3	2	0	0	0	2	0	0	0	2	2	15
Total	0	8	2	5	15	0	1	0	3	4	2	2	0	0	4	0	0	0	3	3	26
Grand Total	0	13	2	7	22	0	1	0	16	17	2	8	0	0	10	0	0	0	9	9	58
Apprch %	0	59.1	9.1	31.8		0	5.9	0	94.1		20	80	0	0		0	0	0	100		
Total %	0	22.4	3.4	12.1	37.9	0	1.7	0	27.6	29.3	3.4	13.8	0	0	17.2	0	0	0	15.5	15.5	

		0	and A					rton St				0	land A					reth F			
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thr u	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Ana	alysis F	rom 04:	00 PM	to 05:4	5 PM - P	eak 1 of	f 1												•		
Peak Hour for	Entire I	ntersec	tion Be	gins at	04:00 PM	I															
04:00 PM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	2	2	5
04:15 PM	0	2	0	0	2	0	0	0	4	4	0	2			2	0	0	0	3	3	11
04:30 PM	0	0	0	0	0	0	0	0	7	7	0	2	0	0	2	0	0	0	0	0	9
04:45 PM	0	1	0	2	3	0	0	0	2	2	0	1	0	0	1	0	0	0	1	1	7
Total Volume	0	5	0	2	7	0	0	0	13	13	0	6	0	0	6	0	0	0	6	6	32
% App. Total	0	71.4	0	28.6		0	0	0	100		0	100	0	0		0	0	0	100		
PHF	.000	.625	.000	.250	.583	.000	.000	.000	.464	.464	.000	.750	.000	.000	.750	.000	.000	.000	.500	.500	.727



N/S: Highland Avenue

E/W: Morton Street/Hildreth Place

City, State: Needham, MA Client: LCB Senior Living

File Name: Highland at Morton-Hildreth PM

Site Code : 12041900 Start Date : 12/4/2019

Page No : 1

Groups Printed- Bikes by Direction

		Highl	and A	venue			Mo	rton St		2111			and A	venue			Hile	dreth P	lace		
		Fr	om No	rth			F	rom Ea	ast			Fr	om So	uth			F	rom W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	2
04:15 PM	0	0	0	0	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0	9
04:30 PM	0	0	0	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	1	1	6
04:45 PM	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	3
Total	0	0	0	1	1	0	0	0	16	16	0	0	0	0	0	0	0	0	3	3	20
05:00 PM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2	0	0	0	1	1	4
Total	0	0	0	1	1	0	0	0	1	1	0	0	0	2	2	0	0	0	2	2	6
Grand Total	0	0	0	2	2	0	0	0	17	17	0	0	0	2	2	0	0	0	5	5	26
Apprch %	0	0	0	100		0	0	0	100		0	0	0	100		0	0	0	100		
Total %	0	0	0	7.7	7.7	0	0	0	65.4	65.4	0	0	0	7.7	7.7	0	0	0	19.2	19.2	

		Highl	and A	venue			Mo	rton St	treet			Highl	and A	venue			Hilo	lreth P	lace		
		Fr	om No	rth			F	rom E	ast			Fr	om So	uth			Fr	rom W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thr u	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Ana	alysis F	rom 04:	00 PM	to 05:4	5 PM - P	eak 1 of	f 1														
Peak Hour for	Entire I	ntersec	tion Be	gins at	04:00 PM	Į															
04:00 PM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	2
04:15 PM	0	0	0	0	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0	9
04:30 PM	0	0	0	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	1	1	6
04:45 PM	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	3
Total Volume	0	0	0	1	1	0	0	0	16	16	0	0	0	0	0	0	0	0	3	3	20
% App. Total	0	0	0	100		0	0	0	100		0	0	0	0		0	0	0	100		
PHF	.000	.000	.000	.250	.250	.000	.000	.000	.444	.444	.000	.000	.000	.000	.000	.000	.000	.000	.750	.750	.556



N/S: Highland Avenue E/W: West Street

City, State: Needham, MA Client: LCB Senior Living File Name: Highland at West AM

Site Code : 12052019 Start Date : 12/5/2019

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Groups Printed- Cars - Heavy Vehicles - Bikes by Direction

		Highl	and A	venue		•	W	est Str	eet	•		Highl	and A	venue			W	est Str	eet		
		Fr	om No	rth			F	rom E	ast			Fr	om So	uth			Fı	rom W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	14	44	7	3	68	6	15	3	0	24	3	64	3	3	73	5	39	49	1	94	259
07:15 AM	9	75	3	12	99	11	15	6	1	33	8	81	2	1	92	8	48	54	3	113	337
07:30 AM	16	71	5	1	93	8	22	11	8	49	17	87	5	1	110	5	53	48	1	107	359
07:45 AM	21	55	4	3	83	14	36	9	10	69	10	122	8	5	145	8	52	42	5_	107	404
Total	60	245	19	19	343	39	88	29	19	175	38	354	18	10	420	26	192	193	10	421	1359
	1															ı					1
08:00 AM	27	66	3	4	100	8	52	13	10	83	11	117	7	1	136	5	46	46	1	98	417
08:15 AM	21	65	6	5	97	18	37	4	6	65	19	85	5	0	109	8	52	46	1	107	378
08:30 AM	17	69	10	4	100	11	43	9	3	66	12	89	8	3	112	7	46	55	2	110	388
08:45 AM	18	55	10	1	84	13	42	5	3	63	15	95	6	0	116	6	48	42	0	96	359
Total	83	255	29	14	381	50	174	31	22	277	57	386	26	4	473	26	192	189	4	411	1542
Grand Total	143	500	48	33	724	89	262	60	41	452	95	740	44	14	893	52	384	382	14	832	2901
Apprch %	19.8	69.1	6.6	4.6		19.7	58	13.3	9.1		10.6	82.9	4.9	1.6		6.2	46.2	45.9	1.7		
Total %	4.9	17.2	1.7	1.1	25	3.1	9	2.1	1.4	15.6	3.3	25.5	1.5	0.5	30.8	1.8	13.2	13.2	0.5	28.7	
Cars	132	467	48	15	662	89	253	59	18	419	94	706	43	8	851	49	378	368	11	806	2738
% Cars	92.3	93.4	100	45.5	91.4	100	96.6	98.3	43.9	92.7	98.9	95.4	97.7	57.1	95.3	94.2	98.4	96.3	78.6	96.9	94.4
Heavy Vehicles																					
% Heavy Vehicles	7.7	6.6	0	54.5	8.6	0	3.4	1.7	56.1	7.3	1.1	4.6	2.3	35.7	4.6	5.8	1.6	3.7	21.4	3.1	5.6
Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	7.1	0.1	0	0	0	0	0	0



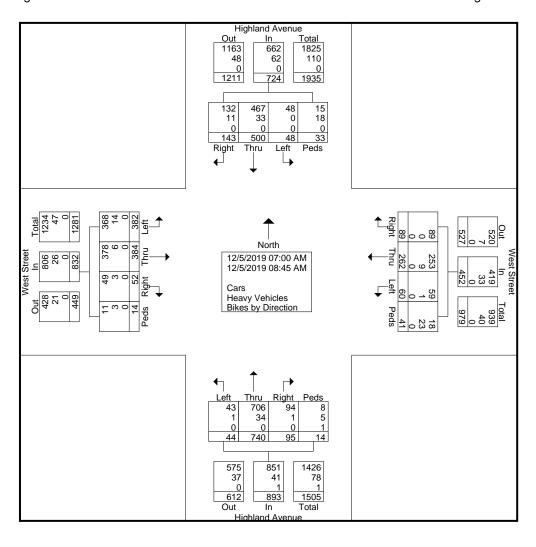
N/S: Highland Avenue E/W: West Street

City, State: Needham, MA Client: LCB Senior Living

File Name: Highland at West AM

Site Code : 12052019 Start Date : 12/5/2019

Page No : 2



		High	land A	venue			W	est Str	eet			Highl	and A	venue			W	est Str	eet		
		Fı	om No	rth			F	rom Ea	ast			Fr	om So	uth			Fı	rom W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour An	alysis F	rom 07	:00 AM	to 08:4	15 AM - 1	Peak 1 o	of 1														
Peak Hour for	Entire 1	Intersec	tion Be	gins at (07:45 AN	1															
07:45 AM	21	55	4	3	83	14	36	9	10	69	10	122	8	5	145	8	52	42	5		
08:00 AM	27	66	3	4	100	8	52	13	10	83	11	117	7	1	136	5	46	46	1	98	417
08:15 AM	21	65	6	5		18	37	4	6	65	19										
08:30 AM	17	69	10	4	100	11	43	9	3	66	12	89	8	3	112	7	46	55	2	110	388
Total Volume	86	255	23	16	380	51	168	35	29	283	52	413	28	9	502	28	196	189	9	422	1587
% App. Total	22.6	67.1	6.1	4.2		18	59.4	12.4	10.2		10.4	82.3	5.6	1.8		6.6	46.4	44.8	2.1		
PHF	.796	.924	.575	.800	.950	.708	.808	.673	.725	.852	.684	.846	.875	.450	.866	.875	.942	.859	.450	.959	.951



N/S: Highland Avenue E/W: West Street City, State: Needham, MA Client: LCB Senior Living

File Name : Highland at West AM Site Code : 12052019 Start Date : 12/5/2019

Page No : 1

Groups Printed- Cars

									Orou	ps r riiit	cu- ca										
		Highl	and A	venue			W	est Str	eet			Highl	land Av	venue			\mathbf{W}	est Str	eet		
		Fr	om No	rth			Fı	om Ea	ast			Fr	om Sou	ıth			Fı	rom W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	12	40	7	2	61	6	12	3	0	21	3	59	3	1	66	3	39	45	1	88	236
07:15 AM	7	70	3	6	86	11	13	6	0	30	8	74	2	1	85	8	48	53	3	112	313
07:30 AM	15	64	5	0	84	8	22	10	3	43	16	85	5	0	106	5	53	47	0	105	338
07:45 AM	19	55	4	2	80	14	36	9	3	62	10	118	8	3	139	8	49	42	4	103	384
Total	53	229	19	10	311	39	83	28	6	156	37	336	18	5	396	24	189	187	8	408	1271
08:00 AM	26	63	3	2	94	8	51	13	5	77	11	113	6	1	131	4	45	45	1	95	397
08:15 AM	19	62	6	2	89	18	37	4	4	63	19	81	5	0	105	8	51	43	0	102	359
08:30 AM	17	64	10	0	91	11	42	9	1	63	12	84	8	2	106	7	45	51	2	105	365
08:45 AM	17	49	10	1	77	13	40	5	2	60	15	92	6	0	113	6	48	42	0	96	346
Total	79	238	29	5	351	50	170	31	12	263	57	370	25	3	455	25	189	181	3	398	1467
Grand Total	132	467	48	15	662	89	253	59	18	419	94	706	43	8	851	49	378	368	11	806	2738
Apprch %	19.9	70.5	7.3	2.3		21.2	60.4	14.1	4.3		11	83	5.1	0.9		6.1	46.9	45.7	1.4		
Total %	4.8	17.1	1.8	0.5	24.2	3.3	9.2	2.2	0.7	15.3	3.4	25.8	1.6	0.3	31.1	1.8	13.8	13.4	0.4	29.4	

			and Av					est Str rom Ea				0	land A					est Str rom W			
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thr u	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Ana	alysis F	rom 07:	00 AM	to 08:4	45 AM - I	Peak 1 c	of 1														
Peak Hour for	Entire 1	Intersec	tion Be	gins at	07:45 AN	1															
07:45 AM	19	55	4	2								118	8	3	139	8			4		
08:00 AM	26	63	3	2	94	8	51	13	5	77	11	113	6	1	131	4	45	45	1	95	397
08:15 AM	19	62	6	2	89	18	37	4	4	63	19						51	43	0	102	359
08:30 AM	17	64	10															51		105	365
Total Volume	81	244	23	6	354	51	166	35	13	265	52	396	27	6	481	27	190	181	7	405	1505
% App. Total	22.9	68.9	6.5	1.7		19.2	62.6	13.2	4.9		10.8	82.3	5.6	1.2		6.7	46.9	44.7	1.7		
PHF	.779	.953	.575	.750	.941	.708	.814	.673	.650	.860	.684	.839	.844	.500	.865	.844	.931	.887	.438	.964	.948



N/S: Highland Avenue E/W: West Street

City, State: Needham, MA Client: LCB Senior Living

File Name : Highland at West AM Site Code : 12052019 Start Date : 12/5/2019

Page No : 1

Groups Printed- Heavy Vehicles

								GIU	upsiii	meu- m	avy v	incres									
		Highl	and Av	venue			W	est Str	eet			Highl	and A	venue			W	est Str	eet		
		Fr	om No	rth			Fı	rom Ea	ast			Fr	om Sou	ıth			Fı	om W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	2	4	0	1	7	0	3	0	0	3	0	5	0	2	7	2	0	4	0	6	23
07:15 AM	2	5	0	6	13	0	2	0	1	3	0	7	0	0	7	0	0	1	0	1	24
07:30 AM	1	7	0	1	9	0	0	1	5	6	1	2	0	1	4	0	0	1	1	2	21
07:45 AM	2	0	0	1	3	0	0	0	7	7	0	4	0	1	5	0	3	0	1	4	19
Total	7	16	0	9	32	0	5	1	13	19	1	18	0	4	23	2	3	6	2	13	87
08:00 AM	1	3	0	2	6	0	1	0	5	6	0	4	1	0	5	1	1	1	0	3	20
08:15 AM	2	3	0	3	8	0	0	0	2	2	0	4	0	0	4	0	1	3	1	5	19
08:30 AM	0	5	0	4	9	0	1	0	2	3	0	5	0	1	6	0	1	4	0	5	23
08:45 AM	1	6	0	0	7	0	2	0	1	3	0	3	0	0	3	0	0	0	0	0	13
Total	4	17	0	9	30	0	4	0	10	14	0	16	1	1	18	1	3	8	1	13	75
Grand Total	11	33	0	18	62	0	9	1	23	33	1	34	1	5	41	3	6	14	3	26	162
Apprch %	17.7	53.2	0	29		0	27.3	3	69.7		2.4	82.9	2.4	12.2		11.5	23.1	53.8	11.5		
Total %	6.8	20.4	0	11.1	38.3	0	5.6	0.6	14.2	20.4	0.6	21	0.6	3.1	25.3	1.9	3.7	8.6	1.9	16	

			and A					est Str				0	and A					est Str			
		Fr	om No	rth			F1	rom Ea	ast			Fr	om So	uth			F1	rom W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thr u	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Ana	alysis F	rom 07:	00 AM	to 08:4	45 AM - F	Peak 1 c	of 1														
Peak Hour for	Entire I	ntersec	tion Be	gins at	07:00 AM	1															
07:00 AM	2			_			3							2	7	2		4		6	23
07:15 AM	2	5	0	6	13	0	2	0	1	3	0	7									24
07:30 AM	1	7	0	1	9	0	0	1			1								1		
07:45 AM	2	0	0	1	3	0	0	0	7	7	0	4	0	1	5	0	3	0	1	4	19
Total Volume	7	16	0	9	32	0	5	1	13	19	1	18	0	4	23	2	3	6	2	13	87
% App. Total	21.9	50	0	28.1		0	26.3	5.3	68.4		4.3	78.3	0	17.4		15.4	23.1	46.2	15.4		
PHF	.875	.571	.000	.375	.615	.000	.417	.250	.464	.679	.250	.643	.000	.500	.821	.250	.250	.375	.500	.542	.906



N/S: Highland Avenue E/W: West Street

City, State: Needham, MA Client: LCB Senior Living File Name: Highland at West AM

Site Code : 12052019 Start Date : 12/5/2019

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Groups Printed- Bikes by Direction

										cu- Dik	55 NJ 2										1
		High	land A	venue			W	est Str	eet			Highl	and A	venue			W	est Str	eet		
		Fr	om No	orth			F	rom E	ast			Fr	om Sou	uth			Fı	rom W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1
Apprch %	0	0	0	0		0	0	0	0		0	0	0	100		0	0	0	0		
Total %	0	0	0	0	0	0	0	0	0	0	0	0	0	100	100	0	0	0	0	0	

			and Av					est Str rom Ea				0	and A					est Str com W			
		I I	OIII INO	1 111			r	tom E	15t			I I	om So	1111			I I	OIII VV	esi		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thr u	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Ana	alysis F	rom 07:	00 AM	to 08:4	45 AM - F	Peak 1 c	of 1														
Peak Hour for	Entire I	ntersec	tion Be	gins at	07:00 AM	1															
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1
% App. Total	0	0	0	0		0	0	0	0		0	0	0	100		0	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.250	.000	.000	.000	.000	.000	.250



N/S: Highland Avenue E/W: West Street

City, State: Needham, MA Client: LCB Senior Living File Name: Highland at West PM

Site Code : 12042019 Start Date : 12/4/2019

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Groups Printed- Cars - Heavy Vehicles - Bikes by Direction

		Highl	and A	venue			W	est Str			10105	High	land A	venue			W	est Str	eet		
		Fr	om No	rth			F	rom Ea	ast			Fr	om So	uth			Fı	rom W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	11	84	10	1	106	14	38	10	3	65	16	90	2	7	115	11	50	43	4	108	394
04:15 PM	15	105	12	5	137	11	30	14	12	67	13	61	9	6	89	7	37	42	3	89	382
04:30 PM	13	101	5	3	122	12	34	16	21	83	9	101	6	6	122	5	53	36	0	94	421
04:45 PM	12	118	2	2	134	15	26	11	7	59	20	84	4	1	109	12	57	43	1_	113	415
Total	51	408	29	11	499	52	128	51	43	274	58	336	21	20	435	35	197	164	8	404	1612
																1					1
05:00 PM	16	113	14	1	144	13	39	22	5	79	11	71	9	0	91	12	62	43	1	118	432
05:15 PM	30	106	9	1	146	14	40	12	3	69	7	89	4	1	101	16	36	32	2	86	402
05:30 PM	8	116	8	1	133	14	33	8	3	58	10	70	7	0	87	15	38	30	0	83	361
05:45 PM	20	98	13	8	139	14	31	18	13	76	8	80	2	2	92	9	52_	28	2	91	398
Total	74	433	44	11	562	55	143	60	24	282	36	310	22	3	371	52	188	133	5	378	1593
Grand Total	125	841	73	22	1061	107	271	111	67	556	94	646	43	23	806	87	385	297	13	782	3205
Apprch %	11.8	79.3	6.9	2.1		19.2	48.7	20	12.1		11.7	80.1	5.3	2.9		11.1	49.2	38	1.7		
Total %	3.9	26.2	2.3	0.7	33.1	3.3	8.5	3.5	2.1	17.3	2.9	20.2	1.3	0.7	25.1	2.7	12	9.3	0.4	24.4	
Cars	118	823	73	17	1031	105	265	110	44	524	94	637	41	15	787	86	384	291	8	769	3111
% Cars	94.4	97.9	100	77.3	97.2	98.1	97.8	99.1	65.7	94.2	100	98.6	95.3	65.2	97.6	98.9	99.7	98	61.5	98.3	97.1
Heavy Vehicles																					
% Heavy Vehicles	5.6	2.1	0	22.7	2.8	1.9	2.2	0.9	34.3	5.8	0	1.4	4.7	34.8	2.4	1.1	0.3	2	38.5	1.7	2.9
Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

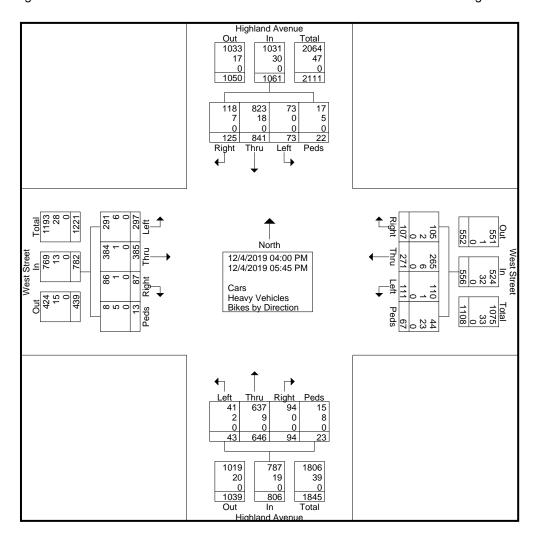


N/S: Highland Avenue E/W: West Street

City, State: Needham, MA Client: LCB Senior Living File Name: Highland at West PM

Site Code : 12042019 Start Date : 12/4/2019

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		Highl	and A	venue			W	est Str	eet			Highl	land A	venue			W	est Str	eet		
		Fr	om No	rth			F	rom E	ast			Fr	om So	uth			Fı	om W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Ana	alysis F	rom 04	:00 PM	to 05:4	5 PM - P	eak 1 o	f 1														
Peak Hour for	Entire 1	Intersec	tion Be	gins at	04:30 PM	1															
04:30 PM	13	101	5	3					21	83	9	101		6	122	5	53	36	0	94	421
04:45 PM	12	118	2	2	134	15	26	11	7	59	20							43		Į.	
05:00 PM	16	113	14	1	144	13	39	22	5	79	11	71	9	0	91	12	62	43	1	118	432
05:15 PM	30				146	14	40									16			2		
Total Volume	71	438	30	7	546	54	139	61	36	290	47	345	23	8	423	45	208	154	4	411	1670
% App. Total	13	80.2	5.5	1.3		18.6	47.9	21	12.4		11.1	81.6	5.4	1.9		10.9	50.6	37.5	1		
PHF	.592	.928	.536	.583	.935	.900	.869	.693	.429	.873	.588	.854	.639	.333	.867	.703	.839	.895	.500	.871	.966



N/S: Highland Avenue E/W: West Street

City, State: Needham, MA Client: LCB Senior Living

File Name : Highland at West PM Site Code : 12042019 Start Date : 12/4/2019

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Groups Printed- Cars

										portini											1
		High	land A	venue			W	est Str	eet			Highl	and A	venue			W	est Str	eet		
		Fr	om No	orth			F	rom E	ast			Fr	om Sou	uth			F	rom W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	11	82	10	1	104	14	37	10	1	62	16	89	2	4	111	11	50	41	3	105	382
04:15 PM	13	104	12	4	133	10	30	13	6	59	13	60	9	5	87	7	36	42	3	88	367
04:30 PM	11	98	5	1	115	12	32	16	11	71	9	97	5	5	116	5	53	34	0	92	394
04:45 PM	11	117	2	2	132	15	25	11	6	57	20	83	3	1	107	12	57	43	1	113	409
Total	46	401	29	8	484	51	124	50	24	249	58	329	19	15	421	35	196	160	7	398	1552
05:00 PM	16	108	14	0	138	13	39	22	4	78	11	71	9	0	91	12	62	41	0	115	422
05:15 PM	29	103	9	1	142	13	40	12	3	68	7	89	4	0	100	16	36	32	1	85	395
05:30 PM	8	116	8	0	132	14	31	8	2	55	10	68	7	0	85	14	38	30	0	82	354
05:45 PM	19	95	13	8	135	14	31	18	11	74	8	80	2	0	90	9	52	28	0	89	388
Total	72	422	44	9	547	54	141	60	20	275	36	308	22	0	366	51	188	131	1	371	1559
Grand Total	118	823	73	17	1031	105	265	110	44	524	94	637	41	15	787	86	384	291	8	769	3111
Apprch %	11.4	79.8	7.1	1.6		20	50.6	21	8.4		11.9	80.9	5.2	1.9		11.2	49.9	37.8	1		
Total %	3.8	26.5	2.3	0.5	33.1	3.4	8.5	3.5	1.4	16.8	3	20.5	1.3	0.5	25.3	2.8	12.3	9.4	0.3	24.7	

		0	and Av					est Str rom Ea				0	land A					est Str rom W			
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thr u	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour An	alysis F	rom 04:	00 PM	to 05:4	5 PM - P	eak 1 of	f 1												•		
Peak Hour for	Entire I	ysis From 04:00 PM to 05:45 PM - Peak 1 of 1 ntire Intersection Begins at 04:30 PM 11 98 5 1 115 12 32 16 11 71 9 97 5 116 5 53 34																			
04:30 PM	11	98	5	1	115	12	32	16	11	71	9	97		5	116	5	53	34	0	92	394
04:45 PM	11	117	2	2		15	25	11	6	57	20							43	1		
05:00 PM	16	108	14	0	138	13	39	22	4	78	11	71	9	0	91	12	62	41	0	115	422
05:15 PM	29				142	13	40									16					
Total Volume	67	426	30	4	527	53	136	61	24	274	47	340	21	6	414	45	208	150	2	405	1620
% App. Total	12.7	80.8	5.7	0.8		19.3	49.6	22.3	8.8		11.4	82.1	5.1	1.4		11.1	51.4	37	0.5		
PHF	.578	.910	.536	.500	.928	.883	.850	.693	.545	.878	.588	.876	.583	.300	.892	.703	.839	.872	.500	.880	.960



N/S: Highland Avenue E/W: West Street

City, State: Needham, MA Client: LCB Senior Living File Name: Highland at West PM Site Code: 12042019

Site Code : 12042019 Start Date : 12/4/2019

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Groups Printed- Heavy Vehicles

									_	iiicu- ii	. , , , ,										1
		High	land A	venue			W	est Str	eet			High	land A	venue			W	est Str	eet		
		Fı	om No	rth			F	rom E	ast			Fr	om So	uth			F	rom W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	2	0	0	2	0	1	0	2	3	0	1	0	3	4	0	0	2	1	3	12
04:15 PM	2	1	0	1	4	1	0	1	6	8	0	1	0	1	2	0	1	0	0	1	15
04:30 PM	2	3	0	2	7	0	2	0	10	12	0	4	1	1	6	0	0	2	0	2	27
04:45 PM	1	1	0	0	2	0	1_	0	1	2	0	1	1	0	2	0	0	0	0	0	6
Total	5	7	0	3	15	1	4	1	19	25	0	7	2	5	14	0	1	4	1	6	60
05:00 PM	0	5	0	1	6	0	0	0	1	1	0	0	0	0	0	0	0	2	1	3	10
05:15 PM	1	3	0	0	4	1	0	0	0	1	0	0	0	1	1	0	0	0	1	1	7
05:30 PM	0	0	0	1	1	0	2	0	1	3	0	2	0	0	2	1	0	0	0	1	7
05:45 PM	1	3	0	0	4	0	0	0	2	2	0	0	0	2	2	0	0	0	2	2	10
Total	2	11	0	2	15	1	2	0	4	7	0	2	0	3	5	1	0	2	4	7	34
Grand Total	7	18	0	5	30	2	6	1	23	32	0	9	2	8	19	1	1	6	5	13	94
Apprch %	23.3	60	0	16.7		6.2	18.8	3.1	71.9		0	47.4	10.5	42.1		7.7	7.7	46.2	38.5		
Total %	7.4	19.1	0	5.3	31.9	2.1	6.4	1.1	24.5	34	0	9.6	2.1	8.5	20.2	1.1	1.1	6.4	5.3	13.8	

		0	land Av					est Str rom Ea				0	and A					est Str rom W			
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thr u	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Ana	alysis F	rom 04:	00 PM	to 05:4	5 PM - P	eak 1 of	1														
Peak Hour for	Entire I	ntersec	tion Be	gins at	04:00 PM	I															
04:00 PM	0	2	0	0	2	0	1	0	2	3	0	1	0	3				2	1	3	12
04:15 PM	2					1	0	1									1	0	0	1	15
04:30 PM	2	3	0	2	7	0	2		10	12	0	4	1	1	6	0	0	2	0	2	27
04:45 PM	1	1	0	0	2	0	1	0	1	2	0	1	1	0	2	0	0	0	0	0	6
Total Volume	5	7	0	3	15	1	4	1	19	25	0	7	2	5	14	0	1	4	1	6	60
% App. Total	33.3	46.7	0	20		4	16	4	76		0	50	14.3	35.7		0	16.7	66.7	16.7		
PHF	.625	.583	.000	.375	.536	.250	.500	.250	.475	.521	.000	.438	.500	.417	.583	.000	.250	.500	.250	.500	.556



N/S: Highland Avenue E/W: West Street

City, State: Needham, MA Client: LCB Senior Living

File Name : Highland at West PM Site Code : 12042019 Start Date : 12/4/2019

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Groups Printed- Bikes by Direction

								Oroup	<i>)</i> 5 1 1 111	tea- Dike	o by D	пссио	11								
		Highl	and A	venue			W	est Str	eet			Highl	land A	venue			W	est Str	eet		
		Fr	om No	rth			Fı	rom Ea	ast			Fr	om Sou	uth			Fı	rom W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

		0	and Av					est Str rom Ea				0	and A					est Str om W			
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thr u	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Ana	alysis F	rom 04:	00 PM	to 05:4	5 PM - P	eak 1 of	f 1														
Peak Hour for	Entire I	ntersec	tion Be	gins at	04:00 PM	I															
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

350 Myles Standish Blvd. Suite 103 Taunton, MA 02780

(508)-823-2245

File Name: West St at Avery Sq_AM

Site Code : 12052019 Start Date : 12/5/2019

Page No

N/S: Avery Square E/W: West Street McMahon Associates Needham Heights, MA

Bikes by Direction

% Bikes by Direction

Groups Printed- Cars & CW Pedestrians - HV & CCW Pedestrians - Bikes by Direction Avery Square West Street West Street Avery Square From North From East From South From West Left Peds Left Peds Start Time Right Thru Right Thru Left Peds Right Right Thru Left Peds Thru App. Total App. Total App. Total App. Total Int. Total 07:00 AM 07:15 AM 07:30 AM 07:45 AM Total 08:00 AM 08:15 AM 08:30 AM 08:45 AM Total Grand Total Apprch % 75.8 10.7 13.5 Total % 92.3 0.9 1.7 0.9 4.3 1.7 12.4 0.4 0.4 0.4 0.4 2.6 1.7 Cars & CW Pedestrians % Cars & CW % HV & CCW

			ery Squ					est Stre					ery Squ					est Stre			
		Fr	om No	rth			F	rom Ea	ıst			Fr	om Sou	ıth			Fı	rom We	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Ana	alysis Fı	rom 07:	00 AM	to 08:4	5 AM - 1	Peak 1 o	of 1														
Peak Hour for	Entire I	ntersec	tion Be	gins at (07:45 AN	M															
07:45 AM	29	0	0	7	36	1	0	0	0	1	0	0	0	2	2	0	0	0	2	2	41
08:00 AM	18	0	5	1	24	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	25
08:15 AM	19	0	1	4	24	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	26
08:30 AM	29	0	7	5	41	0	0	0	0	0	0	1	0	0	1	0	0	0	2	2	44
Total Volume	95	0	13	17	125	1	0	1	0	2	0	1	1	3	5	0	0	0	4	4	136
% App. Total	76	0	10.4	13.6		50	0	50	0		0	20	20	60		0	0	0	100		
PHF	.819	.000	.464	.607	.762	.250	.000	.250	.000	.500	.000	.250	.250	.375	.625	.000	.000	.000	.500	.500	.773

350 Myles Standish Blvd. Suite 103 Taunton, MA 02780

(508)-823-2245

File Name: West St at Avery Sq_AM

Site Code : 12052019 Start Date : 12/5/2019

Page No : 1

N/S: Avery Square E/W: West Street McMahon Associates Needham Heights, MA

Groups Printed- Cars & CW Pedestrians

								noups	Timed	- Cars &	CWI	acsura	113								1
		Av	ery Squ	uare			W	est Str	eet			Ave	ery Squ	ıare			W	est Str	eet		
		F1	rom No	rth			F	rom Ea	ıst			Fr	om Sou	ıth			F	rom W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	18	0	2	3	23	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0	25
07:15 AM	15	0	3	8	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26
07:30 AM	17	0	3	0	20	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	21
07:45 AM	29	0	0	7	36	1	0	0	0	1	0	0	0	2	2	0	0	0	2	2	41
Total	79	0	8	18	105	1	0	0	1	2	0	0	0	4	4	0	0	0	2	2	113
08:00 AM	18	0	5	1	24	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	25
08:15 AM	19	0	1	4	24	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	26
08:30 AM	29	0	7	5	41	0	0	0	0	0	0	1	0	0	1	0	0	0	2	2	44
08:45 AM	18	0	2	1	21	0	0	1	0	1	1	0	1	1	3	0	0	0	0	0	25
Total	84	0	15	11	110	0	0	2	0	2	1	1	2	2	6	0	0	0	2	2	120
Grand Total	163	0	23	29	215	1	0	2	1	4	1	1	2	6	10	0	0	0	4	4	233
Apprch %	75.8	0	10.7	13.5		25	0	50	25		10	10	20	60		0	0	0	100		
Total %	70	0	9.9	12.4	92.3	0.4	0	0.9	0.4	1.7	0.4	0.4	0.9	2.6	4.3	0	0	0	1.7	1.7	

		Ave	ery Squ	are			W	est Stre	eet			Av	ery Squ	are			W	est Stre	eet]
		Fr	om No	rth			F	rom Ea	st			Fr	om Sou	ıth			F	rom W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Ana	alysis Fı	rom 07:	00 AM	to 08:4	45 AM - 1	Peak 1 o	of 1														
Peak Hour for	Entire I	ntersec	tion Be	gins at	07:45 AN	M															
07:45 AM	29	0	0	7	36	1	0	0	0	1	0	0	0	2	2	0	0	0	2	2	41
08:00 AM	18	0	5	1	24	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	25
08:15 AM	19	0	1	4	24	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	26
08:30 AM	29	0	7	5	41	0	0	0	0	0	0	1	0	0	1	0	0	0	2	2	44
Total Volume	95	0	13	17	125	1	0	1	0	2	0	1	1	3	5	0	0	0	4	4	136
% App. Total	76	0	10.4	13.6		50	0	50	0		0	20	20	60		0	0	0	100		
PHF	.819	.000	.464	.607	.762	.250	.000	.250	.000	.500	.000	.250	.250	.375	.625	.000	.000	.000	.500	.500	.773

350 Myles Standish Blvd. Suite 103 Taunton, MA 02780

(508)-823-2245

File Name: West St at Avery Sq_AM

Site Code : 12052019 Start Date : 12/5/2019

Page No : 1

N/S: Avery Square E/W: West Street McMahon Associates Needham Heights, MA

Groups Printed- HV & CCW Pedestrians

			ery Squ					est Stre					ery Squ					est Stre			
		Fr	om No	rth			F	rom Ea	st			Fr	om Sou	ıth			Fı	rom W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

			ery Squ					est Stre					ery Squ					est Stre			
		Fr	om No	rth			F	rom Ea	st			Fr	om Sou	ıth			F	rom We	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Ana	alysis F	rom 07:	:00 AM	to 08:4	45 AM - 1	Peak 1 o	of 1														
Peak Hour for	Entire I	ntersec	tion Be	gins at	07:00 AN	Л															
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0_
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

350 Myles Standish Blvd. Suite 103 Taunton, MA 02780

(508)-823-2245

File Name: West St at Avery Sq_AM

Site Code : 12052019 Start Date : 12/5/2019

Page No : 1

N/S: Avery Square E/W: West Street McMahon Associates Needham Heights, MA

Groups Printed- Bikes by Direction

								Orot	аратти	itcu- Diki	co by D	nection	1								
			ery Sq					est Str					ery Sqı					est Str			
		F1	om No	orth			F	rom Ea	ast			Fr	om So	uth			F	rom W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

			ery Squ					est Stre					ery Squ					est Stre			
		Fr	om No	rth			F	rom Ea	st			Fr	om Sou	ıth			F	rom We	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Ana	alysis F	rom 07:	:00 AM	to 08:4	45 AM - 1	Peak 1 o	of 1														
Peak Hour for	Entire I	ntersec	tion Be	gins at	07:00 AN	Л															
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0_
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

350 Myles Standish Blvd. Suite 103 Taunton, MA 02780

(508)-823-2245

File Name: West St at Avery Sq_PM

West Street

Site Code : 12042019 Start Date : 12/4/2019

Page No : 1

Avery Square

N/S: Avery Square E/W: West Street McMahon Associates Needham Heights, MA

Avery Square

From North From East From South From West Right Left Peds Thru Left Peds Right Thru Left Peds Start Time Thru Left Peds Right Thru Right App. Total App. Total App. Total App. Total Int. Total 04:00 PM 04:15 PM 04:30 PM 04:45 PM Total 05:00 PM 05:15 PM 05:30 PM 05:45 PM Ω

Groups Printed- Cars & CW Pedestrians - HV & CCW Pedestrians - Bikes by Direction

West Street

05.45 1 141	32	- 0			71	U		- 0		U	U	- 0	- 0		U	0	- 0	- 0	1	1	<u> </u>
Total	95	0	10	13	118	0	0	0	0	0	0	0	1	2	3	0	0	0	1	1	122
	1 4 50				200	1 0								_	- 1	l 6					245
Grand Total	160	0	21	27	208	0	0	0	1	1	0	0	1	6	7	0	0	0	1	1	217
Apprch %	76.9	0	10.1	13		0	0	0	100		0	0	14.3	85.7		0	0	0	100		
Total %	73.7	0	9.7	12.4	95.9	0	0	0	0.5	0.5	0	0	0.5	2.8	3.2	0	0	0	0.5	0.5	
Cars & CW Pedestrians	160	0	21	27	208	0	0	0	1	1	0	0	1	6	7	0	0	0	1	1	217
% Cars & CW Pedestrians	100	0	100	100	100	0	0	0	100	100	0	0	100	100	100	0	0	0	100	100	100
HV & CCW Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% HV & CCW Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

		Ave	ery Squ	are			W	est Stre	eet			Av	ery Squ	are			W	est Stre	eet		
		Fr	om Noi	rth			F	rom Ea	st			Fr	om Sou	ıth			F	rom We	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour An	alysis F	rom 04:	00 PM	to 05:4	5 PM - P	eak 1 o	f 1														
Peak Hour for	Entire 1	ntersect	ion Be	gins at	05:00 PN	1															
05:00 PM	24	0	4	3	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
05:15 PM	19	0	1	1	21	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	23
05:30 PM	20	0	3	2	25	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	26
05:45 PM	32	0	2	7	41	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	42
Total Volume	95	0	10	13	118	0	0	0	0	0	0	0	1	2	3	0	0	0	1	1	122
% App. Total	80.5	0	8.5	11		0	0	0	0		0	0	33.3	66.7		0	0	0	100		
DHE	7/12	000	625	161	720	000	000	000	000	000	000	000	250	500	275	000	000	000	250	250	726

350 Myles Standish Blvd. Suite 103 Taunton, MA 02780

(508)-823-2245

File Name: West St at Avery Sq_PM

Site Code : 12042019 Start Date : 12/4/2019

Page No : 1

N/S: Avery Square E/W: West Street McMahon Associates Needham Heights, MA

Groups Printed- Cars & CW Pedestrians

										- Cars &							***				1
		Av	ery Sq	uare			W	est Stre	eet			Av	ery Squ	iare			W	est Stre	eet		
		Fı	rom No	orth			F	rom Ea	ıst			Fr	om Soi	uth			Fı	rom We	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	19	0	1	4	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
04:15 PM	10	0	2	4	16	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	19
04:30 PM	13	0	3	3	19	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0	21
04:45 PM	23	0	5	3	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
Total	65	0	11	14	90	0	0	0	1	1	0	0	0	4	4	0	0	0	0	0	95
05:00 PM	24	0	4	3	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
05:15 PM	19	0	1	1	21	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	23
05:30 PM	20	0	3	2	25	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	26
05:45 PM	32	0	2	7	41	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	42
Total	95	0	10	13	118	0	0	0	0	0	0	0	1	2	3	0	0	0	1	1	122
Grand Total	160	0	21	27	208	0	0	0	1	1	0	0	1	6	7	0	0	0	1	1	217
Apprch %	76.9	0	10.1	13		0	0	0	100		0	0	14.3	85.7		0	0	0	100		
Total %	73.7	0	9.7	12.4	95.9	0	0	0	0.5	0.5	0	0	0.5	2.8	3.2	0	0	0	0.5	0.5	

		Ave	ery Squ	are			W	est Stre	et			Av	ery Squ	are			W	est Stre	eet]
		Fr	om No	rth			F	rom Ea	st			Fr	om Sou	ıth			F	rom W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour An	alysis F	rom 04:	00 PM	to 05:4	5 PM - P	eak 1 o	f 1														
Peak Hour for	Entire I	ntersect	tion Be	gins at	05:00 PM	1															
05:00 PM	24	0	4	3	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
05:15 PM	19	0	1	1	21	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	23
05:30 PM	20	0	3	2	25	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	26
05:45 PM	32	0	2	7	41	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	42
Total Volume	95	0	10	13	118	0	0	0	0	0	0	0	1	2	3	0	0	0	1	1	122
% App. Total	80.5	0	8.5	11		0	0	0	0		0	0	33.3	66.7		0	0	0	100		
PHF	.742	.000	.625	.464	.720	.000	.000	.000	.000	.000	.000	.000	.250	.500	.375	.000	.000	.000	.250	.250	.726

350 Myles Standish Blvd. Suite 103 Taunton, MA 02780

(508)-823-2245

File Name: West St at Avery Sq_PM

Site Code : 12042019 Start Date : 12/4/2019

Page No : 1

N/S: Avery Square E/W: West Street McMahon Associates Needham Heights, MA

Groups Printed- HV & CCW Pedestrians

		Ave	ery Squ	ıare				est Stre		π, α			ery Squ	iare			W	est Stre	eet]
			om No				F	rom Ea	st			Fr	om So	uth			Fı	rom We	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

	J 1							est Stre	eet			Av	ery Squ	are		West Street					
		Fr	om No	rth			F	rom Ea	st			Fr	om Sou	ıth			F	rom Wo	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour An	alysis Fı	om 04:	00 PM	to 05:4	15 PM - P	eak 1 o	f 1														
Peak Hour for	Entire I	ntersec	tion Be	gins at	04:00 PN	1															
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0_
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

350 Myles Standish Blvd. Suite 103 Taunton, MA 02780

(508)-823-2245

File Name: West St at Avery Sq_PM

Site Code : 12042019 Start Date : 12/4/2019

Page No : 1

N/S: Avery Square E/W: West Street McMahon Associates Needham Heights, MA

Groups Printed- Bikes by Direction

		Ave	ery Squ	ıare		West Street						Av	ery Sqı	ıare		West Street					
		Fr	om No	rth			F	rom Ea	ıst			Fr	om Soi	uth			Fı	rom We	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0_
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0_
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

	Avery Square West Street							Av	ery Squ	are		West Street									
		Fr	om No	rth			F	rom Ea	st			Fr	om Sou	ıth			F	rom Wo	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Ana	alysis Fı	om 04:	00 PM	to 05:4	5 PM - P	eak 1 o	f 1														
Peak Hour for	Entire I	ntersec	tion Be	gins at	04:00 PM	1															
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0_
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

APPENDIX B

Seasonal Adjustment Data

SEASONAL ADJUSTMENT DATA

Senior Living Residential Redevelopment

Needham, MA

MassDO	T Continuou	s Count Station			December	% Above
ID	Town	Roadway	Year	AADT	ADT	AADT
4165	Newton	Yankee Division	2014	145,000	139,000	-4%
		Highway				

APPENDIX C

Crash Summary

CRASH ANALYSIS

Senior Living Residential Redevelopment

Needham, MA

14ccanani, 14171	West Street at		Highland Avenue at
	Avery Square/	West Street at	Morton Street/
	Site Driveway	Highland Avenue	Site Driveway
Year			
2013	2	5	2
2014	0	10	1
2015	1	7	0
2016	1	3	1
2017	2	5	1
Type			
Angle	4	10	0
Rear-end	1	9	3
Sideswipe	0	9	1
Head-on	0	0	0
Single Vehicle	1	2	1
Severity			
Property Damage	6	25	2
Personal Injury	0	4	3
Fatality	0	0	0
Unknown	0	1	0
Weather			
Clear	5	24	4
Cloudy	0	3	1
Rain	1	2	0
Snow	0	1	0
Time			
7:00 AM to 9:00 AM	0	4	0
9:00 AM to 4:00 PM	3	17	3
4:00 PM to 6:00 PM	0	4	0
6:00 PM to 7:00 AM	3	5	2
Total	6	30	5
Crash Rate	0.34	0.77	0.21
State Average	0.57	0.78	0.57
District 6 Average	0.52	0.71	0.52

Source: MassDOT

APPENDIX D

Traffic Projection Model

TRAFFIC PROJECTION MODEL

Weekday Morning Peak Hour LCB Senior Living

Needham, MA

Intersection	Dir.	Turn	2019 Counted Volumes	Seasonal Adjustment	2019 Existing Volumes	Background Growth 7 yrs (at 1% per year)	2026 No-Build Volumes	New Project PERCENT ENTER	New Project Trips ENTER	New Project PERCENT EXIT	New Project Trips EXIT	New Project Trips TOTAL	2026 Build Volumes
West Street at	EB	Т	400	16	416	30	446		0	•	0	0	446
Site Driveway/Avery Square		R	0	0	0	0	0	25%	4		0	4	4
	WB	L	1	0	1	0	1	30%	5		0	5	6
		T	281	11	292	21	313		0		0	0	313
	NB	L	2	0	2	0	2		0	25%	4	4	6
		R	0	0	0	0	0		0	30%	5	5	5
	SB	L	13	1	14	1	15		0		0	0	15
		T	0	0	0	0	0		0		0	0	0
		R	95	4	99	7	106		0		0	0	106
West Street at	EB	L	189	8	197	14	211		0	20%	3	3	214
Highland Avenue		T	196	8	204	15	219		0	10%	2	2	221
		R	28	1	29	2	31		0		0	0	31
	WB	L	35	1	36	3	39	5%	1		0	1	40
		T	168	7	175	13	188	10%	2		0	2	190
		R	51	2	53	4	57		0		0	0	57
	NB	L	28	1	29	2	31		0		0	0	31
		T	413	17	430	31	461		0	15%	2	2	463
		R	52	2	54	4	58		0	5%	1	1	59
	SB	L	23	1	24	2	26		0		0	0	26
		T	255	10	265	19	284	15%	2		0	2	286
		R	86	3	89	6	95	20%	3		0	3	98
Highland Avenue at	EB	L	0	0	0	0	0		0	20%	3	3	3
Site Driveway/Morton Street		T	0	0	0	0	0		0		0	0	0
		R	1	0	1	0	1		0	25%	4	4	5
	WB	L	8	0	8	1	9		0		0	0	9
		T	0	0	0	0	0		0		0	0	0
		R	9	0	9	1	10		0		0	0	10
	NB	L	0	0	0	0	0	25%	4		0	4	4
		T	472	20	492	36	528		0		0	0	528
		R	26	1	27	2	29		0		0	0	29
	SB	L	5	0	5	0	5		0		0	0	5
		T	291	12	303	24	327		0		0	0	327
		R	0	0	0	0	0	20%	3		0	3	3

Peak Hour: 7:15 AM - 8:15 AM

TRAFFIC PROJECTION MODEL

Weekday Afternoon Peak Hour LCB Senior Living

Needham, MA

I de d'	р.	T	2019 Counted Volumes	Seasonal Adjustment	2019 Existing Volumes	Background Growth 7 yrs (at 1%	2026 No-Build Volumes	New Project PERCENT	New Project Trips	New Project PERCENT	New Project Trips	New Project Trips	2026 Build Volumes
Intersection		Turn	204	15	400	per year)	420	ENTER	ENTER	EXIT	EXIT	TOTAL	420
West Street at	EB	T	394		409	30	439	250/	0		0	0	439
Site Driveway/Avery Square	TATO	R	0	0	0	0	0	25%	5		0	5	5
	WB		0	0	0	0	0	30%	6		0	6	6
		T	233	10	243	17	260		0	2=0/	0	0	260
	NB		1	0	1	0	1		0	25%	6	6	7
		R	0	0	0	0	0		0	30%	7	7	7
	SB	L	13	1	14	1	15		0		0	0	15
		T	0	0	0	0	0		0		0	0	0
		R	79	3	82	6	88		0		0	0	88
West Street at	EB	L	154	6	160	12	172		0	20%	5	5	177
Highland Avenue		T	208	8	216	16	232		0	10%	2	2	234
		R	45	2	47	3	50		0		0	0	50
	WB	L	61	2	63	5	68	5%	1		0	1	69
		T	139	6	145	10	155	10%	2		0	2	157
		R	54	2	56	4	60		0		0	0	60
	NB	L	23	1	24	2	26		0		0	0	26
		T	345	14	359	26	385		0	15%	4	4	389
		R	47	2	49	4	53		0	5%	1	1	54
	SB	L	30	1	31	2	33		0		0	0	33
		T	438	18	456	33	489	15%	3		0	3	492
		R	71	3	74	5	79	20%	4		0	4	83
Highland Avenue at	ЕВ	T	0	0	0	0	0		0	20%	5	5	5
Site Driveway/Morton Street	Ц	T	0	0	0	0	0		0	=676	0	0	0
Site Bilveway, Morton Street		R	0	0	0	0	0		0	25%	6	6	6
	WB		6	0	6	0	6		0	2570	0	0	6
	WD	T	1	0	1	0	1		0		0	0	1
		R	0	0	9	1	10		0		0	0	10
	NB		1	0	1	0	10	25%	5		0	5	
	IND	L T	379	17	206	31	427	25/0	0		0	0	6 427
		-		1/	396	31			0		0	0	
	CD	R	23	1	24	<u> </u>	26		0		0	U	26
	SB	L	16	1	17	1	18		0		0	U	18
		1	526	21	547	40	587	200/	U		0	U	587
		K	2	U	2	0	2	20%	4		0	4	6

Peak Hour: 4:30 PM - 5:30 PM

APPENDIX E

Highway Capacity Manual Methodologies

CAPACITY/LEVEL-OF-SERVICE ANALYSES METHODOLOGY

The detailed capacity/level-of-service analysis contained in this traffic impact study was performed in accordance with the standard techniques contained in the *Highway Capacity Manual*. (1) By definition, capacity represents "the maximum rate of flow that can reasonably be expected to pass a point on a uniform section of a lane or roadway under prevailing roadway, traffic, and control conditions." The level of functioning of an intersection or a uniform section of a lane or roadway can be expressed in terms of levels of service. Level of service (LOS) is defined as "a qualitative measure describing operational conditions within a traffic stream, and their perception by motorists and/or passengers". Such measures include "speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety."

At unsignalized intersections, a methodology for evaluating the relative functioning of intersections controlled by stop or yield signs has been developed, and is based on several assumptions, including:

- Major street flows are not affected by the minor (stop-sign controlled) street movements.
- Left turns from the major street to the minor street are influenced only by opposing major street through flow.
- Minor street left turns are impeded by all major street traffic plus opposing minor street traffic.
- Minor street through traffic is impeded by all major street traffic.
- Minor street right turns are impeded only by the major street traffic coming from the left.

The concept of stop-controlled or yield-controlled intersection analysis is based on the estimate of average total delay on minor streets. The methodology of analysis relies on three elements: the size and distribution of gaps in the major traffic stream, the usefulness of these gaps to the minor stream drivers, and the relative priority of the various traffic streams at the intersection. The results of the analysis provide an estimate of average total delay for the various critical movements at the unsignalized intersections. Correlation between average total delay and the respective levels of service are provided for unsignalized intersections as follows:

⁽¹⁾ Transportation Research Board, Highway Capacity Manual, 6th Edition, published by the Transportation Research Board, Washington, DC, 2016.

Unsignalized Intersections								
Level of Service	Control Delay Per Vehicle							
	(seconds)							
A	0 - 10							
В	>10 – 15							
С	>15 – 25							
D	>25 – 35							
E	>35 – 50							
F	> 50							

At signalized intersections, an additional element must be considered: time allocation. Level of service is based on the average control delay per vehicle for various movements within the intersection. Volume/capacity relationships also affect the operations of signalized intersections. Thus, both volume/capacity and delay must be considered to evaluate the overall operation of a signalized intersection. Correlation between average delay per vehicle and the respective levels of service are provided for signalized intersections as follows:

	Signalized Intersections
Level of	Control Delay Per Vehicle
Service	(seconds)
A	<u><</u> 10
В	>10 – 20
С	>20 – 35
D	>35 – 55
E	>55 – 80
F	> 80

APPENDIX F

2019 Existing Capacity/Level-of-Service Analysis

	۶	→	*	•	←	•	1	1	~	1	Ţ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	7>		*	f)			4			4	
Traffic Volume (vph)	197	204	29	36	175	53	29	430	54	24	265	89
Future Volume (vph)	197	204	29	36	175	53	29	430	54	24	265	89
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	175		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25		•	25		•	25		-	25		•
Satd. Flow (prot)	1736	1807	0	1805	1820	0	0	1803	0	0	1759	0
Flt Permitted	0.270			0.608	.020		•	0.963	•		0.943	
Satd. Flow (perm)	493	1807	0	1155	1820	0	0	1742	0	0	1664	0
Right Turn on Red	100	1001	No	1100	1020	No	· ·		No		1001	No
Satd. Flow (RTOR)									110			
Link Speed (mph)		30			30			30			30	
Link Opeed (mph) Link Distance (ft)		180			604			813			295	
Travel Time (s)		4.1			13.7			18.5			6.7	
Confl. Peds. (#/hr)		7.1			10.7			10.5			0.1	
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.87	0.87	0.87	0.88	0.88	0.88	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	3%	4%	0%	1%	0%	4%	4%	0%	0%	4%	6%
Bus Blockages (#/hr)	0	0	0	0 /0	0	0 /0	0	0	0 /8	0 70	0	0 70
Parking (#/hr)	U	U	U	U	U	U	U	U	U	U	U	U
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)		0 70			0 70			0 /0			0 70	
Lane Group Flow (vph)	205	243	0	41	262	0	0	583	0	0	398	0
Turn Type	pm+pt	NA	U	Perm	NA	U	Perm	NA	U	Perm	NA	U
Protected Phases	рин - рг 5	2		r C illi	6		r c iiii	8		r eiiii	4	
Permitted Phases	2			6	U		8	0		4	4	
Detector Phase	5	2		6	6		8	8		4	4	
Switch Phase	J			U	U		0	0		7	4	
Minimum Initial (s)	6.0	6.0		6.0	6.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	11.0		11.0	11.0		15.0	15.0		15.0	15.0	
	15.0	45.0		30.0	30.0		45.0	45.0		45.0	45.0	
Total Split (s) Total Split (%)	13.4%	40.2%		26.8%	26.8%		40.2%	40.2%		40.2%	40.2%	
. , ,	4.0	40.2%		4.0	4.0		40.2%	40.2%		40.2%	40.2%	
Yellow Time (s) All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
		0.0			0.0		1.0	0.0		1.0	0.0	
Lost Time Adjust (s)	0.0			0.0								
Total Lost Time (s)	5.0	5.0		5.0	5.0			5.0			5.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes	None		Yes	Yes		Min	Min		Min	Min	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effet Green (s)	35.1	35.1		19.3	19.3			37.1			37.1	
Actuated g/C Ratio	0.36	0.36		0.20	0.20			0.38			0.38	
v/c Ratio	0.67	0.38		0.18	0.74			0.89			0.64	
Control Delay	39.0	28.5		38.2	52.8			49.2			33.2	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	39.0	28.5		38.2	52.8			49.2			33.2	

Synchro 10 Report Page 1

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type Protected Phases	9
Permitted Phases	9
Detector Phase	
Switch Phase	
	7.0
Minimum Initial (s)	7.0 22.0
Minimum Split (s)	22.0
Total Split (s)	20%
Total Split (%)	
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	No
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	

	•	\rightarrow	*	1	•	•	1	†	-	-	Į.	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	С		D	D			D			С	
Approach Delay		33.3			50.8			49.2			33.2	
Approach LOS		С			D			D			С	
Queue Length 50th (ft)	107	129		24	172			374			223	
Queue Length 95th (ft)	#185	198		54	251			#600			352	
Internal Link Dist (ft)		100			524			733			215	
Turn Bay Length (ft)				175								
Base Capacity (vph)	308	777		310	489			749			715	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.67	0.31		0.13	0.54			0.78			0.56	

Intersection Summary

Area Type: Other

Cycle Length: 112

Actuated Cycle Length: 98.8

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.89

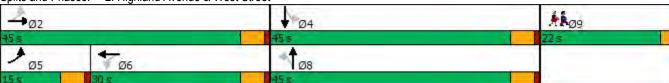
Intersection Signal Delay: 41.7 Intersection LOS: D
Intersection Capacity Utilization 70.4% ICU Level of Service C

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 2: Highland Avenue & West Street



Lane Group	Ø9
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Intersection												
Int Delay, s/veh	2.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		1			ની			4			4	
Traffic Vol, veh/h	0	416	0	1	292	0	2	0	0	14	0	99
Future Vol, veh/h	0	416	0	1	292	0	2	0	0	14	0	99
Conflicting Peds, #/hr	0	0	3	3	0	0	4	0	0	0	0	4
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	82	82	82	50	50	50	75	75	75
Heavy Vehicles, %	2	4	2	0	3	2	0	2	2	0	2	0
Mvmt Flow	0	438	0	1	356	0	4	0	0	19	0	132
Major/Minor N	/lajor1		Į.	Major2		N	Minor1		N	Minor2		
Conflicting Flow All	-	0	0	441	0	0	869	799	441	796	799	360
Stage 1	-	-	-	-	-	-	441	441	-	358	358	-
Stage 2	-	-	-	-	-	-	428	358	-	438	441	-
Critical Hdwy	-	-	-	4.1	-	-	7.1	6.52	6.22	7.1	6.52	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.52	-	6.1	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.52	-	6.1	5.52	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4.018	3.318	3.5	4.018	3.3
Pot Cap-1 Maneuver	0	-	-	1130	-	0	274	319	616	307	319	689
Stage 1	0	-	-	-	-	0	599	577	-	664	628	-
Stage 2	0	-	-	-	-	0	609	628	-	601	577	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	1127	-	-	220	318	614	307	318	686
Mov Cap-2 Maneuver	-	-	-	-	-	-	220	318	-	307	318	-
Stage 1	-	-	-	-	-	-	599	575	-	664	627	-
Stage 2	-	-	-	-	-	-	489	627	-	601	575	-
Ĭ												
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			21.7			13.1		
HCM LOS							С			В		
Minor Lane/Major Mvmt	t _ N	NBLn1	EBT	EBR	WBL	WBT S	SBL _{n1}					
Capacity (veh/h)		220	-	-	1127	-	595					
HCM Lane V/C Ratio		0.018	-	-	0.001	-	0.253					
HCM Control Delay (s)		21.7	-	-	8.2	0	13.1					
HCM Lane LOS		С	-	-	Α	Α	В					
HCM 95th %tile Q(veh)		0.1	-	-	0	-	1					

Intersection												
Int Delay, s/veh	0.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	EDL		EDI	WDL		WDN	NDL	TION	NDI	ODL	3B1 ♣	SDN
Traffic Vol, veh/h	0	4	1	8	4	9	0	492	27	5	303	0
Future Vol, veh/h	0	0	1	8	0	9	0	492	27	5	303	0
Conflicting Peds, #/hr	0	0	0	0	0	0	4	0	3	3	0	4
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	Stop -	Stop -	None	Stop -	Stop -	None	-	-	None	-	-	None
Storage Length	_	_	-	_		110116	_	_	-	_	_	INOITE
Veh in Median Storage		0	_		0	_		0	_	_	0	_
Grade, %	σ, π - -	0	_	_	0	_	_	0	_	_	0	_
Peak Hour Factor	25	25	25	71	71	71	78	78	78	89	89	89
Heavy Vehicles, %	23	2	0	0	2	11	2	3	0	0	4	2
Mvmt Flow	0	0	4	11	0	13	0	631	35	6	340	0
IVIVIIICT IOVV	U	0	7	- 11	U	10	U	001	- 00	J	UTU	U
N. A			_									
	Minor2	10		Minor1			Major1			Major2		
Conflicting Flow All	1011	1025	344	1006	1008	652	344	0	0	669	0	0
Stage 1	356	356	-	652	652	-	-	-	-	-	-	-
Stage 2	655	669	-	354	356	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.2	7.1	6.52	6.31	4.12	-	-	4.1	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.1	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.1	5.52	-	0.040	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.3	3.5	4.018	3.399	2.218	-	-	2.2	-	-
Pot Cap-1 Maneuver	218	235	703	222	240	452	1215	-	-	931	-	-
Stage 1	661	629	-	460	464	-	-	-	-	-	-	-
Stage 2	455	456	-	667	629	-	-	-	-	-	-	-
Platoon blocked, %	040	004	700	240	000	151	1010	-	-	000	-	-
Mov Cap-1 Maneuver	210	231	700	219	236	451	1210	-	-	928	-	-
Mov Cap-2 Maneuver	210	231	-	219	236	-	-	-	-	-	-	-
Stage 1	658	621	-	459	463	-	-	-	-	-	-	-
Stage 2	442	455	-	658	621	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	10.2			18			0			0.1		
HCM LOS	В			С								
Minor Lane/Major Mvn	nt	NBL	NBT	NBR	EBLn1V	VBL n1	SBL	SBT	SBR			
Capacity (veh/h)		1210		-	700	301	928					
HCM Lane V/C Ratio		1210	_		0.006	0.08	0.006	<u>-</u>	<u>-</u>			
HCM Control Delay (s))	0	_	_		18	8.9	0	_			
HCM Lane LOS		A	_	_	В	C	Α	A	_			
HCM 95th %tile Q(veh)	0	_		0	0.3	0	-	_			
TOWN COURT FORM CONTRACTOR	7	- 0				0.0	- 0					

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	₽		*	₽			4			4	
Traffic Volume (vph)	160	216	47	63	145	56	24	359	49	31	456	74
Future Volume (vph)	160	216	47	63	145	56	24	359	49	31	456	74
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	175		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25		•	25			25			25		•
Satd. Flow (prot)	1752	1849	0	1805	1785	0	0	1841	0	0	1802	0
Flt Permitted	0.307	70.10	-	0.576				0.950		•	0.959	
Satd. Flow (perm)	566	1849	0	1094	1785	0	0	1755	0	0	1733	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		180			604			813			295	
Travel Time (s)		4.1			13.7			18.5			6.7	
Confl. Peds. (#/hr)					10.1			10.0			U. 1	
Confl. Bikes (#/hr)												
Peak Hour Factor	0.87	0.87	0.87	0.86	0.86	0.86	0.89	0.89	0.89	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	0%	0%	0%	2%	2%	9%	1%	0%	0%	3%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)		070			070			070			070	
Lane Group Flow (vph)	184	302	0	73	234	0	0	485	0	0	603	0
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1 01111	6		1 01111	8		1 01111	4	
Permitted Phases	2			6			8			4	'	
Detector Phase	5	2		6	6		8	8		4	4	
Switch Phase										'		
Minimum Initial (s)	6.0	6.0		6.0	6.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	11.0		11.0	11.0		15.0	15.0		15.0	15.0	
Total Split (s)	13.0	43.0		30.0	30.0		47.0	47.0		47.0	47.0	
Total Split (%)	11.6%	38.4%		26.8%	26.8%		42.0%	42.0%		42.0%	42.0%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		1.0	0.0		1.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0			5.0			5.0	
Lead/Lag	Lead	3.0		Lag	Lag			5.0			5.0	
Lead-Lag Optimize?	Yes			Yes	Yes							
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)	32.1	32.1		18.2	18.2		IVIIII	38.4		IVIIII	38.4	
Actuated g/C Ratio	0.33	0.33		0.19	0.19			0.40			0.40	
v/c Ratio	0.63	0.33		0.19	0.19			0.40			0.40	
	39.4	32.2		43.0	51.4			33.3			45.7	
Control Delay	0.0			0.0								
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay	39.4	32.2		43.0	51.4			33.3			45.7	

Synchro 10 Report Page 1

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	^
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	7.0
Minimum Initial (s)	7.0
Minimum Split (s)	22.0
Total Split (s)	22.0
Total Split (%)	20%
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	

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Lana Craun	EDI	ГОТ	- EDD	WDI	WDT	WDD	NDI.	NDT	NDD.	CDI	CDT	CDD
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	С		D	D			С			D	
Approach Delay		34.9			49.4			33.3			45.7	
Approach LOS		С			D			С			D	
Queue Length 50th (ft)	97	170		44	152			270			373	
Queue Length 95th (ft)	151	244		84	223			420			#636	
Internal Link Dist (ft)		100			524			733			215	
Turn Bay Length (ft)				175								
Base Capacity (vph)	291	773		301	491			811			801	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.63	0.39		0.24	0.48			0.60			0.75	

Intersection Summary

Area Type: Other

Cycle Length: 112

Actuated Cycle Length: 97.1

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.88

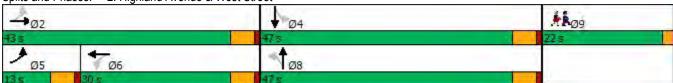
Intersection Signal Delay: 40.3 Intersection LOS: D
Intersection Capacity Utilization 70.9% ICU Level of Service C

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 2: Highland Avenue & West Street



Lane Group	Ø9
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		1			र्स			4			4	
Traffic Vol, veh/h	0	409	0	0	243	0	1	0	0	14	0	82
Future Vol, veh/h	0	409	0	0	243	0	1	0	0	14	0	82
Conflicting Peds, #/hr	0	0	2	2	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	79	79	79	25	25	25	82	82	82
Heavy Vehicles, %	2	1	2	2	4	2	0	2	2	0	2	0
Mvmt Flow	0	470	0	0	308	0	4	0	0	17	0	100
Major/Minor N	lajor1		N	Major2		Λ	/linor1		N	Minor2		
Conflicting Flow All	-	0	0	472	0	0	830	780	473	779	780	308
Stage 1	-	_	-	-	-	-	472	472	_	308	308	-
Stage 2	-	-	-	-	-	-	358	308	-	471	472	-
Critical Hdwy	-	-	-	4.12	-	-	7.1	6.52	6.22	7.1	6.52	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.52	-	6.1	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.52	-	6.1	5.52	-
Follow-up Hdwy	-	-	-	2.218	-	-	3.5	4.018	3.318	3.5	4.018	3.3
Pot Cap-1 Maneuver	0	-	-	1090	-	0	292	327	591	316	327	737
Stage 1	0	-	-	-	-	0	576	559	-	706	660	-
Stage 2	0	-	-	-	-	0	664	660	-	577	559	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	1088	-	-	252	326	589	316	326	737
Mov Cap-2 Maneuver	-	-	-	-	-	-	252	326	-	316	326	-
Stage 1	-	-	-	-	-	-	576	558	-	706	660	-
Stage 2	-	-	-	-	-	-	574	660	-	576	558	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			19.5			12.2		
HCM LOS							С			В		
Minor Lane/Major Mvmt		NBLn1	EBT	EBR	WBL	WBT S	SBI n1					
Capacity (veh/h)		252	-	-	1088	-	617					
HCM Lane V/C Ratio		0.016	_	_	-	_	0.19					
HCM Control Delay (s)		19.5		_	0	_	12.2					
HCM Lane LOS		19.5 C	_	_	A	_	12.2 B					
HCM 95th %tile Q(veh)		0			0	_	0.7					
TION JOHN JOHN (VEII)		U			U		0.1					

New New	
Movement EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT SBR	
Traffic Vol, veh/h	
Traffic Vol, veh/h 0 0 0 6 1 9 1 396 24 17 547 2 Future Vol, veh/h 0 0 0 6 1 9 1 396 24 17 547 2 Conflicting Peds, #/hr 4 0 0 0 0 4 5 0 16 16 0 5 Sign Control Stop Stop Stop Stop Stop Stop Stop Free Free<	
Future Vol, veh/h 0 0 0 6 1 9 1 396 24 17 547 2 Conflicting Peds, #/hr 4 0 0 0 0 4 5 0 16 16 0 5 Sign Control Stop Stop Stop Stop Stop Stop Free	
Conflicting Peds, #/hr 4 0 0 0 0 4 5 0 16 16 0 5 Sign Control Stop Stop Stop Stop Stop Stop Free	
Sign Control Stop Stop Stop Stop Stop Stop Stop Free Stap A	
RT Channelized - None - <th< td=""></th<>	
Storage Length - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 -	
Veh in Median Storage, # - 0	
Grade, % - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 0 - - 0 0 - - 0 0 - - 0 0 - - 0 0 - 1 0 6 1 0 Memory Vehicles, % 2 2 2 2 0 0 0 1 0 6 1 0 Multiput Memory Vehicles, % 2 2 2 Minor 1 Major 1 0 6 1 0 0 0 0 0 0 0 0 0 0	
Peak Hour Factor 25 25 25 71 71 71 78 78 78 89 89 89 Heavy Vehicles, % 2 2 2 2 0 0 0 1 0 6 1 0 Mvmt Flow 0 0 0 8 1 13 1 508 31 19 615 2 Major/Minor Minor1 Major1 Major2 Major2 Major2 <td row<="" td=""></td>	
Mymt Flow 0 0 0 8 1 13 1 508 31 19 615 2 Major/Minor Minor2 Minor1 Major1 Major2 Conflicting Flow All 1196 1216 621 1196 1202 544 622 0 0 555 0 0 Stage 1 659 659 - 542 -	
Major/Minor Minor2 Minor1 Major1 Major2 Conflicting Flow All 1196 1216 621 1196 1202 544 622 0 0 555 0 0 Stage 1 659 659 - 542 542 -<	
Conflicting Flow All 1196 1216 621 1196 1202 544 622 0 0 555 0 0 Stage 1 659 659 - 542 542 -	
Conflicting Flow All 1196 1216 621 1196 1202 544 622 0 0 555 0 0 Stage 1 659 659 - 542 542 -	
Conflicting Flow All 1196 1216 621 1196 1202 544 622 0 0 555 0 0 Stage 1 659 659 - 542 542 -	
Stage 1 659 659 - 542 542 -	
Stage 2 537 557 - 654 660 -	
Critical Hdwy 7.12 6.52 6.22 7.1 6.5 6.2 4.1 - - 4.16 - - Critical Hdwy Stg 1 6.12 5.52 - 6.1 5.5 - <t< td=""></t<>	
Critical Hdwy Stg 2 6.12 5.52 - 6.1 5.5 - <t< td=""></t<>	
Follow-up Hdwy 3.518 4.018 3.318 3.5 4 3.3 2.2 2.254 Pot Cap-1 Maneuver 163 181 487 164 186 543 969 996	
Pot Cap-1 Maneuver 163 181 487 164 186 543 969 996	
Stage 1 453 461 528 523	
U	
Stage 2 528 512 - 459 463	
Platoon blocked, %	
Mov Cap-1 Maneuver 153 172 485 158 177 533 964 981	
Mov Cap-2 Maneuver 153 172 - 158 177	
Stage 1 450 445 - 520 515	
Stage 2 512 504 - 446 447	
Approach EB WB NB SB	
HCM Control Delay, s 0 19.9 0 0.3	
HCM LOS A C	
Minor Lane/Major Mvmt NBL NBT NBR EBLn1WBLn1 SBL SBT SBR	
Capacity (veh/h) 964 264 981	
HCM Lane V/C Ratio 0.001 0.085 0.019	
HCM Control Delay (s) 8.7 0 - 0 19.9 8.7 0 -	
HCM Lane LOS A A - A C A A -	
HCM 95th %tile Q(veh) 0 0.3 0.1	

APPENDIX G

2026 No Build Capacity/Level-of-Service Analysis

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	7>		*	7			4			4	
Traffic Volume (vph)	211	219	31	39	188	57	31	461	58	26	284	95
Future Volume (vph)	211	219	31	39	188	57	31	461	58	26	284	95
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)	· -	0%			0%	· <u>-</u>	· -	0%		· <u> </u>	0%	
Storage Length (ft)	0	070	0	175	070	0	0	0,0	0	0	070	0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25		•	25		J	25		· ·	25		·
Satd. Flow (prot)	1736	1809	0	1805	1820	0	0	1803	0	0	1760	0
Flt Permitted	0.253	1003	U	0.573	1020	U	U	0.961	U	U	0.935	U
Satd. Flow (perm)	462	1809	0	1089	1820	0	0	1738	0	0	1650	0
Right Turn on Red	402	1003	No	1009	1020	No	U	1730	No	U	1030	No
Satd. Flow (RTOR)			INO			INU			INU			INO
,		30			30			30			30	
Link Speed (mph)					604							
Link Distance (ft)		180						813			295	
Travel Time (s)		4.1			13.7			18.5			6.7	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)	0.00	0.00	0.00	0.07	0.07	0.07	0.00	0.00	0.00	0.05	0.05	0.05
Peak Hour Factor	0.96	0.96	0.96	0.87	0.87	0.87	0.88	0.88	0.88	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	3%	4%	0%	1%	0%	4%	4%	0%	0%	4%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	220	260	0	45	282	0	0	625	0	0	426	0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	6.0		5.0	6.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	11.0		10.0	11.0		15.0	15.0		15.0	15.0	
Total Split (s)	15.0	34.0		10.0	29.0		54.0	54.0		54.0	54.0	
Total Split (%)	12.5%	28.3%		8.3%	24.2%		45.0%	45.0%		45.0%	45.0%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0			5.0			5.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)	37.0	29.7		26.2	20.8			42.2			42.2	
Actuated g/C Ratio	0.35	0.28		0.25	0.20			0.40			0.40	
v/c Ratio	0.76	0.51		0.15	0.79			0.90			0.65	
Control Delay	49.7	42.1		29.6	60.0			49.3			32.6	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	49.7	42.1		29.6	60.0			49.3			32.6	
Total Delay	43.1	4Z. I		25.0	00.0			43.3			JZ.U	

Synchro 10 Report Page 1

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type Protected Phases	9
Permitted Phases	9
Detector Phase	
Switch Phase	
	7.0
Minimum Initial (s)	7.0
Minimum Split (s)	22.0
Total Split (s)	22.0
Total Split (%)	18%
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	Ni
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	

	•	\rightarrow	*	1	←	•	1	†	-	-	Į.	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	D		С	Е			D			С	
Approach Delay		45.6			55.8			49.3			32.6	
Approach LOS		D			Е			D			С	
Queue Length 50th (ft)	131	179		24	209			441			259	
Queue Length 95th (ft)	#263	270		50	#314			#634			373	
Internal Link Dist (ft)		100			524			733			215	
Turn Bay Length (ft)				175								
Base Capacity (vph)	290	532		306	443			864			820	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.76	0.49		0.15	0.64			0.72			0.52	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 105.8

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.90

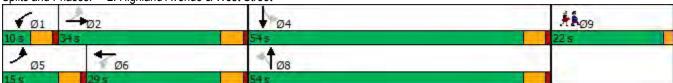
Intersection Signal Delay: 45.7 Intersection LOS: D
Intersection Capacity Utilization 74.5% ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 2: Highland Avenue & West Street



Lane Group	Ø9
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		₽		1,00	4	11511	1100	4	TI DIX	UDL	4	OBIT
Traffic Vol, veh/h	0	446	0	1	313	0	2	0	0	15	0	106
Future Vol, veh/h	0	446	0	1	313	0	2	0	0	15	0	106
Conflicting Peds, #/hr	0	0	3	3	0	0	4	0	0	0	0	4
	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	_	_	None	_	_	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	82	82	82	50	50	50	75	75	75
Heavy Vehicles, %	2	4	2	0	3	2	0	2	2	0	2	0
Mvmt Flow	0	469	0	1	382	0	4	0	0	20	0	141
Major/Minor M	ajor1			Major2		N	/linor1		N	Minor2		
Conflicting Flow All	-	0	0	472	0	0	931	856	472	853	856	386
Stage 1	-	-	-	-	-	-	472	472	-	384	384	-
Stage 2	-	-	-	-	-	-	459	384	-	469	472	-
Critical Hdwy	-	-	-	4.1	-	-	7.1	6.52	6.22	7.1	6.52	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.52	-	6.1	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.52	-	6.1	5.52	-
Follow-up Hdwy	-	-	-	2.2	-	-	3.5	4.018	3.318	3.5	4.018	3.3
Pot Cap-1 Maneuver	0	-	-	1100	-	0	249	295	592	281	295	666
Stage 1	0	-	-	-	-	0	576	559	-	643	611	-
Stage 2	0	-	-	-	-	0	586	611	-	579	559	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	1097	-	-	194	294	590	281	294	663
Mov Cap-2 Maneuver	-	-	-	-	-	-	194	294	-	281	294	-
Stage 1	-	-	-	-	-	-	576	557	-	643	610	-
Stage 2	-	-	-	-	-	-	459	610	-	579	557	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			23.9			13.9		
HCM LOS							С			В		
Minor Lane/Major Mvmt	1	NBLn1	EBT	EBR	WBL	WBT S	SBLn1					
Capacity (veh/h)		194			1097	-						
HCM Lane V/C Ratio		0.021	_		0.001		0.285					
HCM Control Delay (s)		23.9	-	_	8.3	0	13.9					
HCM Lane LOS		C	_	_	A	A	В					
HCM 95th %tile Q(veh)		0.1	_	_	0	-	1.2					
21/2011												

Intersection												
Int Delay, s/veh	0.5											
	EDI	EDT	EDD	WDI	WDT	WDD	NDI	NDT	NDD	CDI	CDT	CDD
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	^	4	4	^	4	40	٥	↔	00	-	4	٥
Traffic Vol, veh/h	0	0	1	9	0	10	0	528	29	5	327	0
Future Vol, veh/h	0	0	1	9	0	10	0	528	29	5	327	0
Conflicting Peds, #/hr	0	0	0	0	0	0	4	0	3		0	4
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	0	-	-	0	-
Veh in Median Storage		0	-	-	0	-	-	0		-	0	-
Grade, % Peak Hour Factor	25	0 25	25	71	71	- 71	- 78	78	- 78	89	89	89
	23	23	0	0	2	11	2	3	0	09	4	2
Heavy Vehicles, % Mvmt Flow	0	0	4	13	0	14	0	677	37	6	367	0
IVIVIIIL FIOW	U	U	4	13	U	14	U	0//	31	0	307	U
Major/Minor	Minor2		1	Minor1			Major1		N	/lajor2		
Conflicting Flow All	1086	1100	371	1080	1082	699	371	0	0	717	0	0
Stage 1	383	383	-	699	699	-	-	-	-	-	-	-
Stage 2	703	717	-	381	383	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.2	7.1	6.52	6.31	4.12	-		4.1	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.1	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.1	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.3	3.5	4.018	3.399	2.218	-	-	2.2	-	-
Pot Cap-1 Maneuver	194	212	679	197	217	425	1188	-	-	893	-	-
Stage 1	640	612	-	434	442	-	-	-	-	-	-	-
Stage 2	428	434	-	645	612	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	186	209	676	194	214	424	1183	-	-	890	-	-
Mov Cap-2 Maneuver	186	209	-	194	214	-	-	-	-	-	-	-
Stage 1	637	605	-	433	441	-	-	-	-	-	-	-
Stage 2	414	433	-	636	605	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	10.4			19.7			0			0.1		
HCM LOS	В			C						0.1		
TOW LOO	U			<u> </u>								
Minor Long/Maior M.	.4	NDI	NDT	NDD	FDL 41	MDL = 4	CDI	CDT	CDD			
Minor Lane/Major Mvm	IL	NBL	NBT		EBLn1V		SBL	SBT	SBR			
Capacity (veh/h)		1183	-	-		272	890	-	-			
HCM Cartest Dates (2)		-	-		0.006		0.006	-	-			
HCM Control Delay (s)		0	-	-		19.7	9.1	0	-			
HCM Lane LOS	\	A	-	-	В	C	A	Α	-			
HCM 95th %tile Q(veh)	0	-	-	0	0.3	0	-	-			

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	1>		*	7			4			4	
Traffic Volume (vph)	172	232	50	68	155	60	26	385	53	33	489	79
Future Volume (vph)	172	232	50	68	155	60	26	385	53	33	489	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	175		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1752	1851	0	1805	1785	0	0	1840	0	0	1802	0
Flt Permitted	0.275		•	0.423		-		0.942	-	•	0.953	
Satd. Flow (perm)	507	1851	0	804	1785	0	0	1738	0	0	1722	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)						110			1.0			110
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		180			604			813			295	
Travel Time (s)		4.1			13.7			18.5			6.7	
Confl. Peds. (#/hr)		7.1			10.7			10.0			0.7	
Confl. Bikes (#/hr)												
Peak Hour Factor	0.87	0.87	0.87	0.86	0.86	0.86	0.89	0.89	0.89	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	0%	0%	0%	2%	2%	9%	1%	0%	0%	3%	6%
Bus Blockages (#/hr)	0	0 /8	0 /0	0 /0	0	0	0	0	0 /8	0 /0	0	0 78
Parking (#/hr)	U	U	U	U	U	U	U	U	U	U	U	U
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)		0 70			0 70			0 70			0 70	
Lane Group Flow (vph)	198	324	0	79	250	0	0	522	0	0	646	0
Turn Type	pm+pt	NA	U	pm+pt	NA	- U	Perm	NA	U	Perm	NA	
Protected Phases	5	2		1	6		1 Cilli	8		1 Cilli	4	
Permitted Phases	2			6	U		8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase	J			ı	U		U	U				
Minimum Initial (s)	5.0	6.0		5.0	6.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	11.0		10.0	11.0		15.0	15.0		15.0	15.0	
Total Split (s)	15.0	31.0		10.0	26.0		57.0	57.0		57.0	57.0	
Total Split (%)	12.5%	25.8%		8.3%	21.7%		47.5%	47.5%		47.5%	47.5%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		1.0	0.0		1.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0			5.0			5.0	
Lead/Lag	Lead	Lag		Lead	Lag			5.0			5.0	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)	34.9	27.7		24.1	18.8		IVIIII	43.9		171111	43.9	
Actuated g/C Ratio	0.33	0.26		0.23	0.18			0.42			0.42	
	0.33	0.26		0.23	0.16			0.42			0.42	
v/c Ratio												
Control Delay	45.2	49.0		36.2	63.7			33.4			47.2	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	45.2	49.0		36.2	63.7			33.4			47.2	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type Protected Phases	9
Permitted Phases	9
Detector Phase	
Switch Phase	
	7.0
Minimum Initial (s)	7.0
Minimum Split (s)	22.0
Total Split (s)	22.0
Total Split (%)	18%
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	Mana
Recall Mode	None
Act Effet Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	

	•	-	7	1	←	*	1	†	1	1	↓	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	D		D	Е			С			D	
Approach Delay		47.5			57.1			33.4			47.2	
Approach LOS		D			Е			С			D	
Queue Length 50th (ft)	121	240		45	187			321			445	
Queue Length 95th (ft)	#208	#359		80	#291			445			#669	
Internal Link Dist (ft)		100			524			733			215	
Turn Bay Length (ft)				175								
Base Capacity (vph)	294	494		234	382			922			913	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.67	0.66		0.34	0.65			0.57			0.71	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 105.5

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.90

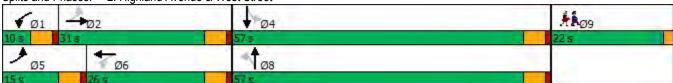
Intersection Signal Delay: 45.4 Intersection LOS: D
Intersection Capacity Utilization 75.0% ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 2: Highland Avenue & West Street



Lane Group	Ø9
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		1			र्स			4			4	
Traffic Vol, veh/h	0	439	0	0	260	0	1	0	0	15	0	88
Future Vol, veh/h	0	439	0	0	260	0	1	0	0	15	0	88
Conflicting Peds, #/hr	0	0	2	2	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	79	79	79	25	25	25	82	82	82
Heavy Vehicles, %	2	1	2	2	4	2	0	2	2	0	2	0
Mvmt Flow	0	505	0	0	329	0	4	0	0	18	0	107
Major/Minor N	1ajor1		N	Major2		N	/linor1		N	/linor2		
Conflicting Flow All		0	0	507	0	0	890	836	508	835	836	329
Stage 1	_	_	_	_	-	-	507	507	-	329	329	-
Stage 2	_	-	_	_	_	-	383	329	-	506	507	-
Critical Hdwy	-	-	-	4.12	-	-	7.1	6.52	6.22	7.1	6.52	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.52	-	6.1	5.52	-
Critical Hdwy Stg 2	_	-	-	-	_	-	6.1	5.52	-	6.1	5.52	_
Follow-up Hdwy	-	-	-	2.218	-	-	3.5	4.018	3.318	3.5	4.018	3.3
Pot Cap-1 Maneuver	0	-	-	1058	_	0	266	303	565	289	303	717
Stage 1	0	-	-	-	-	0	552	539	-	688	646	-
Stage 2	0	-	-	-	_	0	644	646	-	552	539	_
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	1056	-	-	226	302	563	289	302	717
Mov Cap-2 Maneuver	-	-	-	-	-	-	226	302	-	289	302	-
Stage 1	-	-	-	_	-	-	552	538	-	688	646	-
Stage 2	-	-	-	-	-	-	548	646	-	551	538	-
.												
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			21.2			12.7		
HCM LOS							С			В		
							-					
Minor Lane/Major Mvmt		NBLn1	EBT	EBR	WBL	WBT S	SBLn1					
Capacity (veh/h)		226	-	-	1056	-	590					
HCM Lane V/C Ratio		0.018	_	_	-		0.213					
HCM Control Delay (s)		21.2	-	_	0	-	12.7					
HCM Lane LOS		C	_	_	Ā	_	В					
HCM 95th %tile Q(veh)		0.1	-	_	0	-	0.8					
/ / / / / / / / / / / / / / / /		J .,					3.0					

Intersection												
Int Delay, s/veh	0.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	0	0	0	6	1	10	1	427	26	18	587	2
Future Vol, veh/h	0	0	0	6	1	10	1	427	26	18	587	2
Conflicting Peds, #/hr	4	0	0	0	0	4	5	0	16	16	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	e,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	25	25	25	71	71	71	78	78	78	89	89	89
Heavy Vehicles, %	2	2	2	0	0	0	0	1	0	6	1	0
Mvmt Flow	0	0	0	8	1	14	1	547	33	20	660	2
Major/Minor	Minor2		ı	Minor1		ı	Major1		N	Major2		
Conflicting Flow All	1283	1304	666	1283	1289	584	667	0	0	596	0	0
Stage 1	706	706	-	582	582	-	-	-	-	-	-	-
Stage 2	577	598	-	701	707	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.1	6.5	6.2	4.1	-	-	4.16	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.5	4	3.3	2.2	-	-	2.254	-	-
Pot Cap-1 Maneuver	142	160	459	143	165	515	932	-	-	961	-	-
Stage 1	427	439	-	502	502	-	-	-	-	-	-	-
Stage 2	502	491	-	433	441	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	132	151	457	137	156	505	928	-	-	946	-	-
Mov Cap-2 Maneuver	132	151	-	137	156	-	-	-	-	-	-	-
Stage 1	424	422	-	493	493	-	-	-	-	-	-	-
Stage 2	484	483	-	419	424	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			21.4			0			0.3		
HCM LOS	A			С								
				-								
Minor Lane/Major Mvm	nt	NBL	NBT	NBR I	EBLn1V	VBLn1	SBL	SBT	SBR			
Capacity (veh/h)		928	-	-	-	243	946	-	-			
HCM Lane V/C Ratio		0.001	-	-	-	0.099		-	-			
HCM Control Delay (s)		8.9	0	-	0	21.4	8.9	0	-			
HCM Lane LOS		A	A	-	A	С	A	A	-			
HCM 95th %tile Q(veh)	0	_	-	-	0.3	0.1	-	-			
2,000	,											

APPENDIX H

2026 Build Capacity/Level-of-Service Analysis

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	1		×	1			4			4	
Traffic Volume (vph)	214	221	31	40	190	57	31	463	59	26	286	98
Future Volume (vph)	214	221	31	40	190	57	31	463	59	26	286	98
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%	'-		0%	
Storage Length (ft)	0	0 70	0	175	0 70	0	0	070	0	0	070	0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25		U	25		U	25		U	25		U
Satd. Flow (prot)	1736	1809	0	1805	1820	0	0	1803	0	0	1759	0
Flt Permitted	0.251	1003	U	0.568	1020	U	U	0.960	U	U	0.936	U
Satd. Flow (perm)	459	1809	0	1079	1820	0	0	1736	0	0	1652	0
Right Turn on Red	409	1009	No	1079	1020	No	U	1730	No	U	1002	No
			INO			INO			INO			INO
Satd. Flow (RTOR)		20			20			20			20	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		180			604			813			295	
Travel Time (s)		4.1			13.7			18.5			6.7	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.87	0.87	0.87	0.88	0.88	0.88	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	3%	4%	0%	1%	0%	4%	4%	0%	0%	4%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	223	262	0	46	284	0	0	628	0	0	431	0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	6.0		5.0	6.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	11.0		10.0	11.0		15.0	15.0		15.0	15.0	
Total Split (s)	15.0	34.0		10.0	29.0		54.0	54.0		54.0	54.0	
Total Split (%)	12.5%	28.3%		8.3%	24.2%		45.0%	45.0%		45.0%	45.0%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		1.0	0.0		1.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0			5.0			5.0	
\ /								5.0			5.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		N #:	N 4:		N #:	N #:	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effet Green (s)	37.0	29.8		26.3	20.9			42.4			42.4	
Actuated g/C Ratio	0.35	0.28		0.25	0.20			0.40			0.40	
v/c Ratio	0.77	0.52		0.15	0.79			0.90			0.65	
Control Delay	51.1	42.3		29.7	60.4			49.7			32.8	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	51.1	42.3		29.7	60.4			49.7			32.8	

Synchro 10 Report Page 1

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type Protected Phases	9
Permitted Phases	9
Detector Phase	
Switch Phase	
	7.0
Minimum Initial (s)	7.0
Minimum Split (s)	22.0
Total Split (s)	22.0
Total Split (%)	18%
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	Mana
Recall Mode	None
Act Effet Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	

2: Highland Avenue & West Street

	•	\rightarrow	*	1	-	•	1	Ť	-	-	Į.	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	D		С	Е			D			С	
Approach Delay		46.3			56.2			49.7			32.8	
Approach LOS		D			Е			D			С	
Queue Length 50th (ft)	133	181		25	210			444			263	
Queue Length 95th (ft)	#269	272		51	#318			#641			379	
Internal Link Dist (ft)		100			524			733			215	
Turn Bay Length (ft)				175								
Base Capacity (vph)	289	530		304	442			860			818	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.77	0.49		0.15	0.64			0.73			0.53	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 106.1

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.90

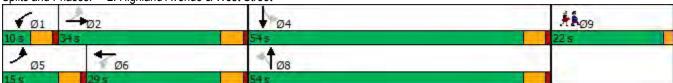
Intersection Signal Delay: 46.1 Intersection LOS: D
Intersection Capacity Utilization 75.0% ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 2: Highland Avenue & West Street



Lane Group	Ø9
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Intersection												
Int Delay, s/veh	2.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		1>			र्स			4			4	
Traffic Vol, veh/h	0	446	4	6	313	0	6	0	5	15	0	106
Future Vol, veh/h	0	446	4	6	313	0	6	0	5	15	0	106
Conflicting Peds, #/hr	0	0	3	3	0	0	4	0	0	0	0	4
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	82	82	82	92	92	92	75	75	75
Heavy Vehicles, %	2	4	2	2	3	2	2	2	2	0	2	0
Mvmt Flow	0	469	4	7	382	0	7	0	5	20	0	141
Major/Minor N	1ajor1		ľ	Major2		l	Minor1		N	Minor2		
Conflicting Flow All	-	0	0	476	0	0	945	870	474	870	872	386
Stage 1	-	-	-	-	-	-	474	474	-	396	396	-
Stage 2	-	-	-	-	-	-	471	396	-	474	476	-
Critical Hdwy	-	-	-	4.12	-	-	7.12	6.52	6.22	7.1	6.52	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.1	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.1	5.52	-
Follow-up Hdwy	-	-	-	2.218	-	-	3.518	4.018	3.318	3.5	4.018	3.3
Pot Cap-1 Maneuver	0	-	-	1086	-	0	242	290	590	274	289	666
Stage 1	0	-	-	-	-	0	571	558	-	633	604	-
Stage 2	0	-	-	-	-	0	573	604	-	575	557	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	1083	-	-	188	287	588	270	286	663
Mov Cap-2 Maneuver	-	-	-	-	-	-	188	287	-	270	286	-
Stage 1	-	-	-	-	-	-	571	556	-	633	599	-
Stage 2	-	-	-	-	-	-	446	599	-	570	555	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.2			18.8			14		
HCM LOS							С			В		
Minor Lane/Major Mvmt		NBLn1	EBT	EBR	WBL	WBT:	SBLn1					
Capacity (veh/h)		272	-		1083	-						
HCM Lane V/C Ratio		0.044	_		0.007		0.287					
HCM Control Delay (s)		18.8	_	-	8.3	0	14					
HCM Lane LOS		С	-	_	A	A	В					
HCM 95th %tile Q(veh)		0.1	-	-	0	-	1.2					

Intersection												
Int Delay, s/veh	0.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	3	0	5	9	0	10	4	528	29	5	327	3
Future Vol, veh/h	3	0	5	9	0	10	4	528	29	5	327	3
Conflicting Peds, #/hr	0	0	0	0	0	0	4	0	3	3	0	4
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	_	_	None	-	-		-	_	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	_	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	71	71	71	78	78	78	89	89	89
Heavy Vehicles, %	2	2	2	0	2	11	2	3	0	0	4	2
Mvmt Flow	3	0	5	13	0	14	5	677	37	6	367	3
Major/Minor	Minor2			Minor1			Major1		<u> </u>	//ajor2		
Conflicting Flow All	1098	1112	373	1092	1095	699	374	0	0	717	0	0
Stage 1	385	385	-	709	709	-	-	-	-	-	-	-
Stage 2	713	727	-	383	386	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.1	6.52	6.31	4.12	-	-	4.1	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.1	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.1	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.5	4.018	3.399	2.218	-	-	2.2	-	-
Pot Cap-1 Maneuver	190	209	673	194	214	425	1184	-	-	893	-	-
Stage 1	638	611	-	428	437	-	-	-	-	-	-	-
Stage 2	423	429	-	644	610	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	181	204	670	190	209	424	1179	-	-	890	-	-
Mov Cap-2 Maneuver	181	204	-	190	209	-	-	-	-	-	-	-
Stage 1	631	604	-	424	433	-	-	-	-	-	-	-
Stage 2	406	425	-	634	603	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	16.1			19.9			0.1			0.1		
HCM LOS	С			С								
Minor Lane/Major Mvm	nt	NBL	NBT	NBR	EBLn1V	VBLn1	SBL	SBT	SBR			
Capacity (veh/h)		1179	-	_	333	268	890	-	-			
HCM Lane V/C Ratio		0.004	-	-	0.026	0.1	0.006	-	-			
HCM Control Delay (s)		8.1	0	-	16.1	19.9	9.1	0	-			
HCM Lane LOS		Α	Α	-	С	С	Α	Α	-			
HCM 95th %tile Q(veh))	0	_	-	0.1	0.3	0	-	-			

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	ĵ.		7	ĵ.			4			4	
Traffic Volume (vph)	177	234	50	69	157	60	26	389	54	33	492	83
Future Volume (vph)	177	234	50	69	157	60	26	389	54	33	492	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	175		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25		-	25		•	25			25		-
Satd. Flow (prot)	1752	1851	0	1805	1785	0	0	1840	0	0	1802	0
Flt Permitted	0.268		•	0.412			•	0.942			0.954	
Satd. Flow (perm)	494	1851	0	783	1785	0	0	1738	0	0	1724	0
Right Turn on Red			No			No	•		No	•		No
Satd. Flow (RTOR)			110									110
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		180			604			813			295	
Travel Time (s)		4.1			13.7			18.5			6.7	
Confl. Peds. (#/hr)					10.1			10.0			0.1	
Confl. Bikes (#/hr)												
Peak Hour Factor	0.87	0.87	0.87	0.86	0.86	0.86	0.89	0.89	0.89	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	0%	0%	0%	2%	2%	9%	1%	0%	0%	3%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)						U						U
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)		0 70			070			070			0 70	
Lane Group Flow (vph)	203	326	0	80	253	0	0	527	0	0	653	0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2	_		6	•		8			4	•	
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase		_		•	•					•	•	
Minimum Initial (s)	5.0	6.0		5.0	6.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	11.0	11.0		10.0	11.0		15.0	15.0		15.0	15.0	
Total Split (s)	15.0	31.0		10.0	26.0		57.0	57.0		57.0	57.0	
Total Split (%)	12.5%	25.8%		8.3%	21.7%		47.5%	47.5%		47.5%	47.5%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0			5.0			5.0	
Lead/Lag	Lead	Lag		Lead	Lag			0.0			0.0	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)	34.9	27.7		24.2	18.9			44.6			44.6	
Actuated g/C Ratio	0.33	0.26		0.23	0.18			0.42			0.42	
v/c Ratio	0.70	0.68		0.35	0.80			0.72			0.90	
Control Delay	47.3	49.4		36.7	64.7			33.4			47.2	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	47.3	49.4		36.7	64.7			33.4			47.2	

01/06/2020 McMahon Associates Synchro 10 Report Page 1

Lane Configurations Traffic Volume (yph)	Lane Group	Ø9
Traffic Volume (vph) Ideal Flow (vphp) Ideal Flo	Lane Configurations	
Future Volume (vph) Iame Width (ft) Grade (%) Storage Langth (ft) Storage Langth (ft) Storage Langth (ft) Satd. Flow (prot) Fit Permitted Satd. Flow (prot) Satd. Flow (prot) Fit Permitted Satd. Flow (prot) Satd. Fl		
Ideal Flow (ryhpi)		
Lane Width (ft) Grade (%) Storage Length (ft) Storage Lanes Taper Length (ft) Satd. Flow (prot) Fit Permitted Satd. Flow (perm) Right Turn on Red Satd. Flow (RTOR) Link Distance (ft) Link Distance (ft) Link Distance (ft) Confl. Bikes (#hr) Peak Hour Factor Growth Factor Heavy Vehicles (%) Bus Blockapes (#hr) Parking (#hr) Mid-Block Traffic (%) Shared Lane Traffic (%) Lane Group Flow (ych) Turn Type Protected Phases Detector Phase Minimum Split (s) Z2.0 Total Split (%) Z2.0 Total Split (%) Z2.0 Total Split (%) Land Lane (%) Land (%) Lan		
Grade (%) Storage Lanes Taper Length (ft) Storage Lanes Taper Length (ft) Storage Lanes Taper Length (ft) Satd. Flow (port) Fit Permitted Satd. Flow (port) Fit Permitted Satd. Flow (FIDN) Right Turn on Red Satd. Flow (RTOR) Link Speed (mph) Link Distance (ft) Travel Time (s) Confl. Peds. (#thn) Confl. Bikes (#thn) Peak Hour Factor Heavy Vehicles (%) Bus Blockages (#thn) Parking (#thn) Mid-Block Traffic (%) Shared Lane Traffic (%) Shared Lane Traffic (%) Lane Group Flow (vph) Turn Type Protected Phases Detector Phases Sulted Phases Detector Phase Minimum Spitt (s) Z2.0 Total Spitt (s) Z2.0 Z2.0 Z2.0 Z2.0 Z2.0 Z2.0 Z2.0 Z2.0		
Storage Langth (ft)		
Storage Lanes Taper Length (ft)		
Taper Length (ft) Satd. Flow (prot) FIT Permitted Satd. Flow (perm) Right Turn on Red Satd. Flow (RTOR) Link Speed (mph) Link Speed (mph) Link Distance (ft) Travel Time (s) Confl. Rikes (#hr) Peak Hour Factor Growth Factor Heavy Vehicles (%) Bus Blockages (#hr) Parking (#hr) Mid-Block Traffic (%) Shared Lane Traffic (%) Lane Group Flow (vph) Turn Type Protected Phases Permitted Phases Detector Phase Switch Phase Minimum Initial (s) Minimum Spit (s) 2.0 Total Spit (s) Cotal Spit (s) Solar Hadjust (s) Total Lost Time (s) Lead-Lag Lead-Lag Lead-Lag Lead-Lag Lead-Lag Lead-Lag Lead-Lag Control Delay Wice Ratio Control Delay Ugueue Delay Veneur (s) Veneur (s		
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Right Turn on Red Satd. Flow (RTOR) Link Speed (mph) Link Distance (ft) Travel Time (s) Confi. Peds. (#hr) Confi. Bikes (#hr) Peak Hour Factor Growth Factor Heavy Vehicles (%) Bus Blockages (#hr) Parking (#hr) Mid-Block Traffic (%) Shared Lane Traffic (%) Lane Group Flow (vph) Turn Type Protected Phases 9 Permitted Phases Detector Phase Switch Phase Minimum Initial (s) Minimum Split (s) Total Split (s) Total Split (%) Lat Time (s) Lost Time (s) Lost Time (s) Lost Time (s) Lead/Lag Lead-Lag Optimize? Recall Mode None Act Effic Green (s) Act Lated Gy C Ratio Vic Ratio Control Delay Queue Delay Vicenal Act Act Set Control Delay Queue Delay Queue Delay Vicenal Act Act Set Control Delay Queue Delay Vicenal Act Act Set Control Delay Queue Delay		
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Switch Phase Minimum Initial (s) 7.0 Minimum Split (s) 22.0 Total Split (s) 22.0 Total Split (%) 18% Yellow Time (s) 2.0 All-Red Time (s) 0.0 Lost Time Adjust (s) Total Lost Time (s) Lead/Lag Lead-Lag Optimize? Recall Mode None Act Effct Green (s) Actuated g/C Ratio v/c Ratio Control Delay Queue Delay		
Minimum Initial (s) 7.0 Minimum Split (s) 22.0 Total Split (s) 22.0 Total Split (%) 18% Yellow Time (s) 2.0 All-Red Time (s) 0.0 Lost Time Adjust (s) Total Lost Time (s) Lead/Lag Lead-Lag Optimize? Recall Mode None Act Effct Green (s) Actuated g/C Ratio v/c Ratio Control Delay Queue Delay		
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Lead-Lag Optimize? Recall Mode None Act Effct Green (s) Actuated g/C Ratio v/c Ratio Control Delay Queue Delay		
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Act Effct Green (s) Actuated g/C Ratio v/c Ratio Control Delay Queue Delay		
Actuated g/C Ratio v/c Ratio Control Delay Queue Delay		None
v/c Ratio Control Delay Queue Delay	()	
Control Delay Queue Delay		
Queue Delay		
Total Delay		
	Total Delay	

2: Highland Avenue & West Street

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	D		D	Е			С			D	
Approach Delay		48.6			57.9			33.4			47.2	
Approach LOS		D			Е			С			D	
Queue Length 50th (ft)	124	242		45	190			326			453	
Queue Length 95th (ft)	#219	#362		81	#298			451			#679	
Internal Link Dist (ft)		100			524			733			215	
Turn Bay Length (ft)				175								
Base Capacity (vph)	289	490		230	377			910			903	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.70	0.67		0.35	0.67			0.58			0.72	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 106.2

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.90

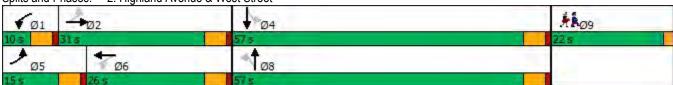
Intersection Signal Delay: 45.8 Intersection LOS: D
Intersection Capacity Utilization 75.9% ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 2: Highland Avenue & West Street



Lane Group	Ø9
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Intersection												
Int Delay, s/veh	2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		7>	LDIX	*****	4	VVDIX.	INDL	4	HUIT	ODL	4	ODIT
Traffic Vol, veh/h	0	439	5	6	260	0	7	0	7	15	0	88
Future Vol, veh/h	0	439	5	6	260	0	7	0	7	15	0	88
Conflicting Peds, #/hr	0	0	2	2	0	0	0	0	1	1	0	0
	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	_	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	79	79	79	92	92	92	82	82	82
Heavy Vehicles, %	2	1	2	2	4	2	2	2	2	0	2	0
Mvmt Flow	0	505	6	8	329	0	8	0	8	18	0	107
Major/Minor M	lajor1			Major2			Minor1		N	Minor2		
Conflicting Flow All	-	0	0	513	0	0	909	855	511	858	858	329
Stage 1	-	-	-	-	-	_	510	510	-	345	345	-
Stage 2	-	-	-	-	-	-	399	345	-	513	513	-
Critical Hdwy	-	-	-	4.12	-	-	7.12	6.52	6.22	7.1	6.52	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.1	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.1	5.52	-
Follow-up Hdwy	-	-	-	2.218	-	-	3.518	4.018	3.318	3.5	4.018	3.3
Pot Cap-1 Maneuver	0	-	-	1052	-	0	256	296	563	279	294	717
Stage 1	0	-	-	-	-	0	546	538	-	675	636	-
Stage 2	0	-	-	-	-	0	627	636	-	548	536	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	1050	-	-	216	293	561	273	291	717
Mov Cap-2 Maneuver	-	-	-	-	-	-	216	293	-	273	291	-
Stage 1	-	-	-	-	-	-	546	537	-	675	630	-
Stage 2	-	-	-	-	-	-	528	630	-	540	535	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.2			17.1			12.9		
HCM LOS							С			В		
Minor Lane/Major Mvmt		NBLn1	EBT	EBR	WBL	WBT:	SBLn1					
Capacity (veh/h)		312	-		1050	-						
HCM Lane V/C Ratio		0.049	_		0.007	_	0.217					
HCM Control Delay (s)		17.1	-	-	8.5	0	12.9					
HCM Lane LOS		С	-	-	A	A	В					
HCM 95th %tile Q(veh)		0.2	-	-	0	-	0.8					

Intersection												
Int Delay, s/veh	0.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	5	0	6	6	1	10	6	427	26	18	587	6
Future Vol, veh/h	5	0	6	6	1	10	6	427	26	18	587	6
Conflicting Peds, #/hr	4	0	0	0	0	4	5	0	16	16	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	e, # -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	71	71	71	78	78	78	89	89	89
Heavy Vehicles, %	2	2	2	0	2	0	2	1	0	6	1	2
Mvmt Flow	5	0	7	8	1	14	8	547	33	20	660	7
Major/Minor I	Minor2		ı	Minor1			Major1		ı	Major2		
Conflicting Flow All	1300	1321	669	1303	1308	584	672	0	0	596	0	0
Stage 1	709	709	-	596	596	-	-	-	-	_	-	-
Stage 2	591	612	-	707	712	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.1	6.52	6.2	4.12	-	-	4.16	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.1	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.1	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.5	4.018	3.3	2.218	-	-	2.254	-	-
Pot Cap-1 Maneuver	138	157	458	139	159	515	919	-	-	961	-	-
Stage 1	425	437	-	494	492	-	-	-	-	-	-	-
Stage 2	493	484	-	429	436	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	127	147	456	130	149	505	915	-	-	946	-	-
Mov Cap-2 Maneuver	127	147	-	130	149	-	-	-	-	-	-	-
Stage 1	417	420	-	480	478	-	-	-	-	-	-	-
Stage 2	470	470	-	408	419	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	23.3			22.1			0.1			0.3		
HCM LOS	С			С								
Minor Lane/Major Mvm	nt	NBL	NBT	NBR	EBLn1V	VBLn1	SBL	SBT	SBR			
Capacity (veh/h)		915	-	-	209	234	946	-	-			
HCM Lane V/C Ratio		0.008	_	_	0.057			_	_			
HCM Control Delay (s)		9	0	-	23.3	22.1	8.9	0	-			
HCM Lane LOS		A	A	-	С	С	Α	A	-			
HCM 95th %tile Q(veh))	0	-	-	0.2	0.3	0.1	-	-			

APPENDIX I

Capacity/Level-of-Service Analysis Summary

CAPACITY ANALYSIS SUMMARY

Weekday Morning Peak Hour Senior Living Residential Redevelopment Needham, MA

		20	2019 Existing			26 No Bui	ld	2026 Build		
Intersection	Movemen	t LOS ⁽¹⁾	Delay ⁽²⁾	$V/C^{(3)}$	LOS	Delay	V/C	LOS	Delay	V/C
West Street at	EB TR	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00
Site Driveway/Avery Square	WB LT	A	0.0	0.00	A	0.0	0.00	A	0.2	0.01
	NB LR	C	21.7	0.02	C	23.9	0.02	C	18.8	0.04
	SB LT	R B	13.1	0.25	В	13.9	0.29	В	14.0	0.29
West Street at	EB L	D	39.0	0.67	D	49.7	0.76	D	51.1	0.77
Highland Avenue	TR	C	28.5	0.38	D	42.1	0.51	D	42.3	0.52
	WB L	D	38.2	0.18	C	29.6	0.15	C	29.7	0.15
	TR	D	52.8	0.74	E	60.0	0.79	E	60.4	0.79
	NB LT	R D	49.2	0.89	D	49.3	0.90	D	49.7	0.90
	SB LT	R C	33.2	0.64	C	32.6	0.65	C	32.8	0.65
	Overall	D	41.7	0.70	D	45.7	0.75	D	46.1	0.75
Highland Avenue at	EB LT	R B	10.2	0.01	В	10.4	0.01	С	16.1	0.03
Site Driveway/Morton Street	WB LT	R C	18.0	0.08	C	19.7	0.10	C	19.9	0.10
	NB LT	R A	0.0	0.00	Α	0.0	0.00	Α	0.1	0.00
	SB LT	R A	0.1	0.01	A	0.1	0.01	A	0.1	0.01

⁽¹⁾ Level-of-Service

⁽²⁾ Average vehicle delay in seconds

⁽³⁾ Volume to capacity ratio

n/a Not Applicable

QUEUE SUMMARY

Weekday Morning Peak Hour Senior Living Residential Redevelopment Needham, MA

		2019 E	2019 Existing		o Build	2026 Build		
Intersection	Movemen	nt 50th Queue ⁽¹⁾	95th Queue ⁽²⁾	50th Queue	95th Queue	50th Queue	95th Queue	
West Street at	EB TR	n/a	0	n/a	0	n/a	0	
Site Driveway/Avery Square	WB LT	n/a	0	n/a	0	n/a	0	
	NB LR	n/a	3	n/a	3	n/a	3	
	SB LT	R n/a	25	n/a	30	n/a	30	
West Street at	EB L	107	185	131	263	133	269	
Highland Avenue	TR	129	198	179	270	181	272	
	WB L	24	54	24	50	25	51	
	TR	172	251	209	314	210	318	
	NB LT	R 374	600	441	634	444	641	
	SB LT	R 223	352	259	373	263	379	
Highland Avenue at	EB LT	R n/a	0	n/a	0	n/a	3	
Site Driveway/Morton Street	WB LT	R n/a	8	n/a	8	n/a	8	
	NB LT	R n/a	0	n/a	0	n/a	0	
	SB LT	R n/a	0	n/a	0	n/a	0	

^{(1) 50}th Percentile Queue Length (ft)

^{(2) 95}th Percentile Queue Length (ft)

n/a Not Applicable

CAPACITY ANALYSIS SUMMARY

Weekday Afternoon Peak Hour Senior Living Residential Redevelopment Needham, MA

		2019 Existing		2026 No Build			2026 Build			
Intersection	Movement	LOS ⁽¹⁾	Delay ⁽²⁾	$V/C^{(3)}$	LOS	Delay	V/C	LOS	Delay	V/C
West Street at	EB TR	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00
Site Driveway/Avery Square	WB LT	A	0.0	0.00	A	0.0	0.00	A	0.2	0.01
	NB LR	C	19.5	0.02	C	21.2	0.02	C	17.1	0.05
	SB LTR	В	12.2	0.19	В	12.7	0.21	В	12.9	0.22
West Street at	EB L	D	39.4	0.63	D	45.2	0.67	D	47.3	0.70
Highland Avenue	TR	C	32.2	0.49	D	49.0	0.67	D	49.4	0.68
	WB L	D	43.0	0.36	D	36.2	0.34	D	36.7	0.35
	TR	D	51.4	0.70	E	63.7	0.79	E	64.7	0.80
	NB LTR	C	33.3	0.70	C	33.4	0.72	C	33.4	0.72
	SB LTR	D	45.7	0.88	D	47.2	0.90	D	47.2	0.90
	Overall	D	40.3	0.71	D	45.4	0.75	D	45.8	0.76
Highland Avenue at	EB LTR	A	0.0	0.00	A	0.0	0.00	С	23.3	0.06
Site Driveway/Morton Street	WB LTR	C	19.9	0.09	C	21.4	0.10	C	22.1	0.10
	NB LTR	A	0.0	0.00	A	0.0	0.00	Α	0.1	0.01
	SB LTR	A	0.3	0.02	A	0.3	0.02	A	0.3	0.02

⁽¹⁾ Level-of-Service

⁽²⁾ Average vehicle delay in seconds

⁽³⁾ Volume to capacity ratio

n/a Not Applicable

QUEUE SUMMARY

Weekday Afternoon Peak Hour Senior Living Residential Redevelopment Needham, MA

		2019 F	2019 Existing		o Build	2026 Build		
Intersection	Moveme	nt 50th Queue ⁽¹⁾	95th Queue ⁽²⁾	50th Queue	95th Queue	50th Queue	95th Queue	
West Street at	EB TF	n/a	0	n/a	0	n/a	0	
Site Driveway/Avery Square	WB LT	n/a	0	n/a	0	n/a	0	
	NB LF	n/a	0	n/a	3	n/a	5	
	SB LT	R n/a	18	n/a	20	n/a	20	
West Street at	EB L	97	151	121	208	124	219	
Highland Avenue	TF	170	244	240	359	242	362	
	WB L	44	84	45	80	45	81	
	TF	152	223	187	291	190	298	
	NB LT	R 270	420	321	445	326	451	
	SB LT	R 373	636	445	669	453	679	
Highland Avenue at	EB LT	R n/a	0	n/a	0	n/a	5	
Site Driveway/Morton Street	WB LT	R n/a	8	n/a	8	n/a	8	
	NB LT	R n/a	0	n/a	0	n/a	0	
	SB LT	R n/a	3	n/a	3	n/a	3	

^{(1) 50}th Percentile Queue Length (ft)

^{(2) 95}th Percentile Queue Length (ft)

n/a Not Applicable

ZONING/LAND USE ARTICLES

ARTICLE 1: AMEND ZONING BY-LAW – AVERY SQUARE OVERLAY DISTRICT

To see if the Town will vote to amend the Needham Zoning By-Law, as follows:

(a) Amend the definition of "Independent Living Apartments" in Section 1.3, Definitions, by (i) adding the words "or Avery Square Overlay District" after the words "Elder Services Zoning District"; (ii) deleting the word "only" before the words "residential uses"; and (iii) adding to the end of the definition the sentence "; provided, however, that within the Avery Square Overlay District, as provided in Section 3.15.3.1, below, such Independent Living Apartments may be located in a building that also houses Assisted Living units, and/or Alzheimer's/Memory Loss units, but need not be part of a Continuing Care Retirement Community.", so that it reads as follows:

A building in the Elder Services Zoning District or Avery Square Overlay District containing three or more dwelling units, which building houses residential uses and support services accessory thereto, intended primarily as independent living units for individuals aged 55 years or older, and/or families with at least one family member aged 55 years or older, within a Continuing Care Retirement Community; provided, however that within the Avery Square Overlay District, as provided in Section 3.15.3.1, below, such Independent Living Apartments may be located in a building that also houses Assisted Living units, and/or Alzheimer's/Memory Loss units, but need not be part of a Continuing Care Retirement Community.

- (b) Amend <u>Section 2.1 Classes of Districts</u> by adding the following term and abbreviation under the subsection Overlay:
 - "ASOD -- Avery Square Overlay District"
- (c) Amend Section 3, Use Regulations, by adding a new Subsection 3.15, <u>Avery Square Overlay District</u>, to read as follows:
 - "3.15 Avery Square Overlay District

3.15.1 Purposes of District

The purposes of the Avery Square Overlay District ("ASOD") are to promote the health, safety, and general welfare of the community by creating opportunities for housing primarily serving individuals 55 years old or older, who wish to live in independent apartments and/or who may need to live in Assisted Living and/or Alzheimer's/Memory Loss facilities, within walking distance of goods and services, public transportation, and the civic life of the town; to promote a vibrant, walkable area within the ASOD, and to encourage and allow redevelopment of the existing property within the ASOD in a manner that will further these purposes. Toward these ends, development in the Avery Square Overlay District shall, as set forth in this Section 3.15, be permitted to exceed the

density and dimensional requirements that normally apply in the underlying zoning district provided that such development complies with all other requirements of this Section 3.15.

3.15.2 Scope of Authority

In the Avery Square Overlay District, all requirements of the underlying district shall remain in effect except where this Section 3.15 provides an alternative to such requirements, in which case the requirements of this Section 3.15 shall prevail. If the provisions of the Avery Square Overlay District are silent on a requirement that applies in the underlying district, the requirements of the underlying district shall apply.

By filing an application for a Special Permit, site plan review or building permit under this Section 3.15, an applicant shall be deemed to accept and agree to the provisions and requirements of this Section 3.15. If an applicant elects to proceed pursuant to zoning provisions of the underlying district, the provisions and requirements of this bylaw applicable in the underlying district shall control and the provision of the Avery Square Overlay District shall not apply.

3.15.3 <u>Use Regulations</u>

3.15.3.1 <u>Permitted Uses</u>

The following uses are permitted in the Avery Square Overlay District as a matter of right:

- (a) Uses exempt from local zoning control under M.G.L. c.40A, s. 3.
- (b) Public, semi-public and institutional uses permitted as of right in the underlying district.
- (c) Business uses permitted as of right in the underlying district.
- (d) Mixed-use buildings, including buildings containing Assisted Living units and/or Alzheimer's/Memory Loss units, and Independent Living Apartments.
- (e) accessory uses permitted as of right in the underlying district.

3.15.3.2 <u>Special Permit Uses</u>

The following uses are allowed by Special Permit:

(a) All uses allowed by special permit in the Avery Square Business District as set forth in Section 3.2.2 of this Bylaw, except those uses permitted as a matter of right as set forth in Section 3.15.3.1, above.

3.15.4 <u>Dimensional Regulations</u>

3.15.4.1 Building Height and Related Requirements

The maximum building height (including mechanical structures such as HVAC equipment) in the Avery Square Overlay District shall be 44 feet. This height limitation shall not apply to elevator shaft overruns, which shall not exceed a maximum height of 49 feet.

A building or structure which is located on property in the Avery Square Overlay District may include, but not exceed, four (4) stories, all of which may be occupied.

For the fourth story, minimum setback requirements, measured from the façade(s) of the building on which such fourth story is located, shall be as follows: from the eastern facade of the building (facing Highland Ave), fifteen (15) feet; from the northern façade of the building (closest to and facing West Street), one hundred and ten (110) feet; from the northern facade of the rear of the building (at the rear of the West Street parking area and closest to the MBTA right-of-way), zero (0) feet; from the western facade of the building, zero (0) feet; from the southern facade of the building, thirty-five (35) feet.

The total floor area of any fourth floor addition to the existing building may not exceed thirty-five percent (35%) of the total roof area of the existing building. Mechanical equipment, including but not limited to HVAC equipment, whether or not enclosed, shall not be included in the calculation of maximum allowable floor area hereunder.

Buildings developed under the regulations of the Avery Square Overlay District shall not be subject to any other height limitations nor any other limitations contained in Section 4.4.3.

3.15.4.2 Building Bulk and Other Requirements

The maximum floor area ratio in the Avery Square Overlay District shall be 1.1. The enclosed area of a building devoted to off-street parking shall not be counted as floor area for purposes of determining the maximum floor area ratio. Buildings developed under the regulations of the Avery Square Overlay District shall not be subject to any other limitations on floor area ratio, lot coverage, or building bulk such as are contained in Sections 4.4.2, 4.4.7 and 4.4.9.

3.15.5 <u>Off-Street Parking</u>

Except as provided below, the off-street parking regulations in Section 5.1 and the regulations for enclosed parking in Section 4.4.6 shall apply in the Avery Square Overlay District.

- (a) The minimum number of off-street parking spaces in Section 5.1.2 shall apply except as follows:
 - (1) For Independent Living Apartments, there shall be one space per Apartment.
 - (2) For Assisted Living units and Alzheimer's/Memory Loss units, the parking requirement shall be the same as the number of spaces that is currently required under Section 5.1.2 for a nursing home or a residential care institution or facility, which is one space for every two beds, plus one space for each two employees on the largest shift.
- (b) Notwithstanding anything to the contrary elsewhere in this Bylaw, including but not limited to Section 4.4.8.4, in the event that land located in the Single Residence B Zoning District
 - (1) is adjacent to the Avery Square Overlay District;
 - (2) is in common ownership with adjacent land located in the Avery Square Overlay District;
 - (3) prior to approval of this Section 3.15, was improved as a parking area associated with a building located in the Avery Square Overlay District; and
 - (4) is located not more than one hundred (100') feet from the boundary line between the Single Residence B Zoning District and the Avery Square Business District,

then said land may, as a matter of right, be used as a parking area accessory to uses permitted in the Avery Square Overlay District by right or by special permit.

3.15.6 Affordable Housing

Any mixed-use building with ten or more Independent Living Apartments shall include affordable housing units as defined in Section 1.3 of this By-Law. The following requirements shall apply to a development that includes affordable units:

- (a) If the Applicant provides at least one-half of the affordable Independent Living Apartments for households with incomes at or below 50% of area median income, the remaining affordable Independent Living Apartments may be rented to households with incomes up to 100% of area median income even if the latter units are not eligible for the Subsidized Housing Inventory, regardless of any requirements to the contrary set forth in Section 1.3.
- (b) For a development with ten or more Independent Living Apartments, ten percent (10%) of the Independent Living Apartments shall be affordable units. In the instance of a fraction, the fraction shall be rounded up to the nearest whole number. There shall be no affordable housing requirement for nursing homes, convalescent homes,

Assisted Living and Alzheimer's/Memory Loss Facilities, or residential care institutions or facilities.

- (c) Affordable units shall be dispersed within the building and not concentrated in one area or on one floor. They shall generally be comparable in size, energy efficiency, quality, convenience, and unit-specific real estate-related amenities to the development's market-rate units. Services and other amenities that may be purchased by residents on a voluntary basis are not to be considered unit-specific real estate-related amenities and are excluded from such comparability requirements.
- (d) The selection of eligible homebuyers or renters for the affordable units shall be in accordance with a marketing plan approved by the Needham Planning Board prior to the issuance of any building permits for the development.
- (e) The affordable units shall be subject to an affordable housing restriction as defined in Section 1.3 of this By-Law with limitations on use, occupancy, resale prices or rents, as applicable, and which provides for periodic monitoring for compliance with the requirements of said restriction.
- (d) Amend Section 4.4.4 <u>Front Setback</u>, by adding the following paragraph after the fourth paragraph of that section:

In the Avery Square Overlay District, the setback, if any, shall be kept open and landscaped with grass, plants, and other non-paving materials such as mulch, and shall be unpaved except for patios, walks, and driveways as defined in section 4.4.5. Walls (including walls serving in part as retaining walls) no higher than 36 inches above the grade of the patios, as well as fencing and privacy screening, along the front and side edges of the patios, shall be allowed in the Avery Square Overlay District.

(e) Amend Section 4.4.6 <u>Enclosed Parking</u>, by adding the phrase "for each square foot" before the words "of parking space (excluding driveways and aisles)" on the fourth line of the first paragraph of that section so that it reads as follows:

Whenever off-street parking is provided underground and/or within a building itself, the maximum area coverage of the building may be increased up to the limits of the required setback as provided herein. The lot coverage of the building may be increased up to 2 ½ % points above the maximum allowed percentage, by one square foot for each square foot of parking space (excluding driveways and aisles) that is underground and/or within the building itself.

Parking which is under a building or partially underground shall, except for driveways, be separated from the street line by building space occupied by the principal use, not by parking.

In the Center Business District, enclosed parking shall be entirely below the grade of adjoining streets measured at their respective center lines. Access to enclosed parking shall be from the rear of the building. If provided, enclosed parking shall not be visible from the street. The placement of parking underground shall not raise the first non-parking floor of a structure above grade. Municipal parking facilities in the Center Business District shall be exempt from this provision.

Or take any other action relative thereto.

INSERTED BY: Planning Board

FINANCE COMMITTEE RECOMMENDS THAT: Recommendation to be Made at Town

Meeting

ARTICLE 2: AMEND ZONING BY-LAW – MAP CHANGE TO AVERY SQUARE OVERLAY DISTRICT

To see if the Town will vote to amend the Needham Zoning By-Law by amending the Zoning Map as follows:

(a) Place in the Avery Square Overlay District all that land described as follows, and superimposing that District over the existing Avery Square Business District:

Beginning at the point of intersection of the westerly sideline of Highland Avenue and the northerly sideline of what was formerly known as Hildreth Place (said former Hildreth Place as shown on Needham Town Assessors Map 63); thence running northerly by the westerly sideline of Highland Avenue to the point of curvature of a curve having a radius of 20 feet and an arc length of 29.27 feet; said curve being a property rounding of the intersection of the westerly sideline of Highland Avenue and the southerly sideline of West Street; thence running northerly, northwesterly, and westerly by said curve to the point of tangency of said curve located on the southerly sideline of West Street; thence running westerly by the southerly sideline of West Street to the point of intersection of the southerly sideline of West Street and the easterly right of way line of MBTA property; thence running southernly by said easterly right of way line of MBTA property to the intersection of the easterly right of way line of MBTA property and the northerly sideline of what was formerly known as Hildreth Place; thence running easterly by the northern boundary of what was formerly known as Hildreth Place, to the point of beginning.

The land is also shown on Needham Town Assessors Map 63, Parcel 37, but excluding any land to the south of the northerly sideline of what was formerly known as Hildreth Place.

Or take any other action relative thereto.

INSERTED BY: Planning Board

FINANCE COMMITTEE RECOMMENDS THAT: Recommendation to be Made at Town Meeting

Article Explanation: This article describes the geographical boundaries of the new Avery Square Overlay District, which is bounded on the north by West Street; on the east by Highland Avenue; on the south by the northern and western boundaries of the property located at 1049 Highland Avenue and the northern boundary of the property located at 95 Dana Place; and on the west by the MBTA commuter railroad right-of-way.

From: Lee Newman
To: Alexandra Clee
Subject: Restaurant help

Date: Friday, May 15, 2020 11:51:22 AM

For Planning Board agenda of May 19, 2020.

Lee Newman forwarded this:

Coronavirus update 5/13/20

Massachusetts Legislative Updates

ABCC alteration of premises issue for outdoor dining

We have worked closely with a number of legislators to introduce legislation that will authorize and allow for the ABCC to defer to local municipalities regarding any alteration of premises that may be needed to expand outdoor dining opportunities. If this legislation were to become law, local license authorities would be able to grant alteration permits instantly. Many municipalities have expressed a desire to be flexible and want to work with their licensed establishments to get them up and running. This legislation would grant them that opportunity.

3rd Party Delivery Ordinances continue to be introduced across MassachusettsTo date, ordinances have been introduced in Boston, Cambridge, Newton, Brookline and Lowell. Additionally, state-wide legislation was filed this week. 3rd party delivery fees and transparency issues have been an on-going issue for restaurant operators, and those have only been exacerbated during the COVID pandemic. The MRA highlighted these issues to elected officials in a letter last month.

Boston considering street shutdowns to allow for expanded outdoor dining

By Gintautas Dumcius | Boston Business Journal

Could Boston officials shut down a North End street to vehicles as the city seeks to restart the economy and help businesses get back on their feet? It's one of the ideas under consideration within City Hall.

Mayor Martin J. Walsh said city officials are looking at ways to expand the space available for pedestrians, small business customers, cyclists and bus commuters.

"I'm going to make an assumption here, that when restaurants open up again, they're not going to open at 100% capacity," Walsh said. "Many of them don't have outdoor dining. Is there a way for us to give them additional capacity by possibly using (the) outdoors in some locations?"

Tight sidewalks and streets make that difficult in some parts of the city, Walsh acknowledged.

Asked whether he'd consider shutting Hanover Street to vehicle traffic, Walsh said, "That's been brought up."

"It's something that we should look at," Walsh added. "That's been brought to me several times about Hanover Street. It sounds great: 'Shut it down. Let's bring all the tables out there just like we do in Newbury St. when we do Open Newbury Street."

But others have raised public-safety concerns. There's a fire station on Hanover Street, and if it's limited to only turning left on Hanover, city officials have to weigh that as well, Walsh said.

His administration plans to come up with proposals for specific locations, he continued.

Asked about Gov. Charlie Baker's four-phase reopening plan, Walsh said the plan is the "right way to do it." Baker, whose reopening commission plans to issue its recommendations on May 18, offered yesterday a broad outline of the four phases, but did not identify a specific timeline or when specific sectors can open.

"I don't think any of us know what the businesses are yet," Walsh said.

If a business makes the list to open during one of the first few phases, Walsh said the city's inspectional services department would be tasked with ensuring the business is following protocols.

When a reporter asked about office buildings, Walsh said City Hall is considering how to open. "We won't be opening 100% capacity. We'll be opening probably 25% to 50% capacity. We'll probably be looking at possibly doing shifts."

Office buildings should take the same things into account, according to Walsh.

1 of 2 5/15/2020, 1:35 PM Tenants should be in contact with building managers about how elevator boardings will be handled and who can come back into the office, he said.

Walsh spoke to reporters days after he <u>canceled a slew of summer events</u> on cityowned property, including parades. But he remained hopeful about the New Kids on the Block concert scheduled for Sept. 18 at Fenway Park.

"I made the decision to cancel parades and festivals because (there were) a lot of questions swirling around," Walsh said. "If we're in a different place in August, in society, and we get to zero cases, I'll be having a different conversation."

Walsh also said that baseball fans are unlikely to be in stands of Fenway Park for the start of season. Multiple media reports say <u>team owners are seeking 82 games</u>, starting in July.

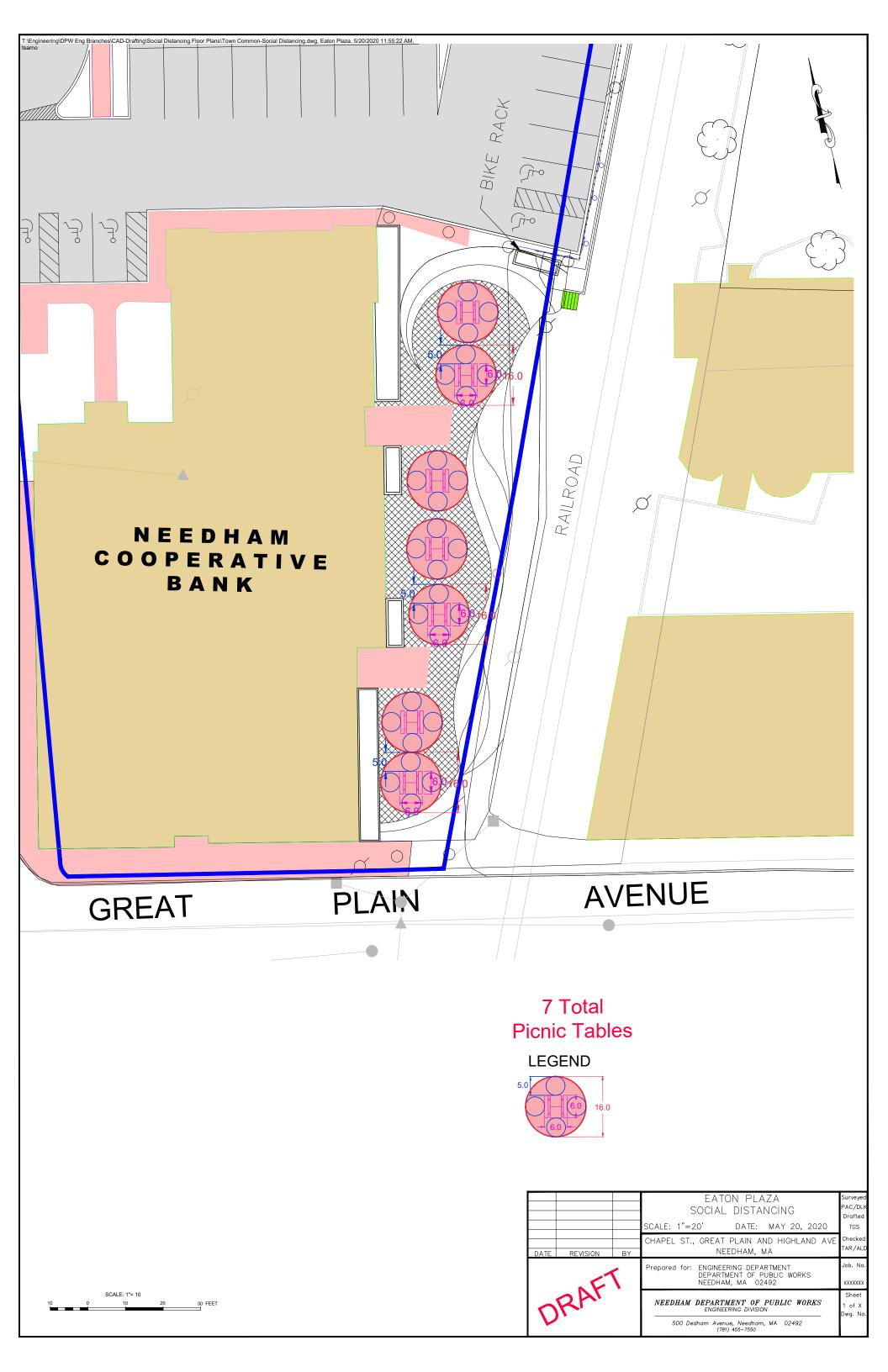
"Maybe there'll be fans by the end of the season and playoff time," Walsh said.

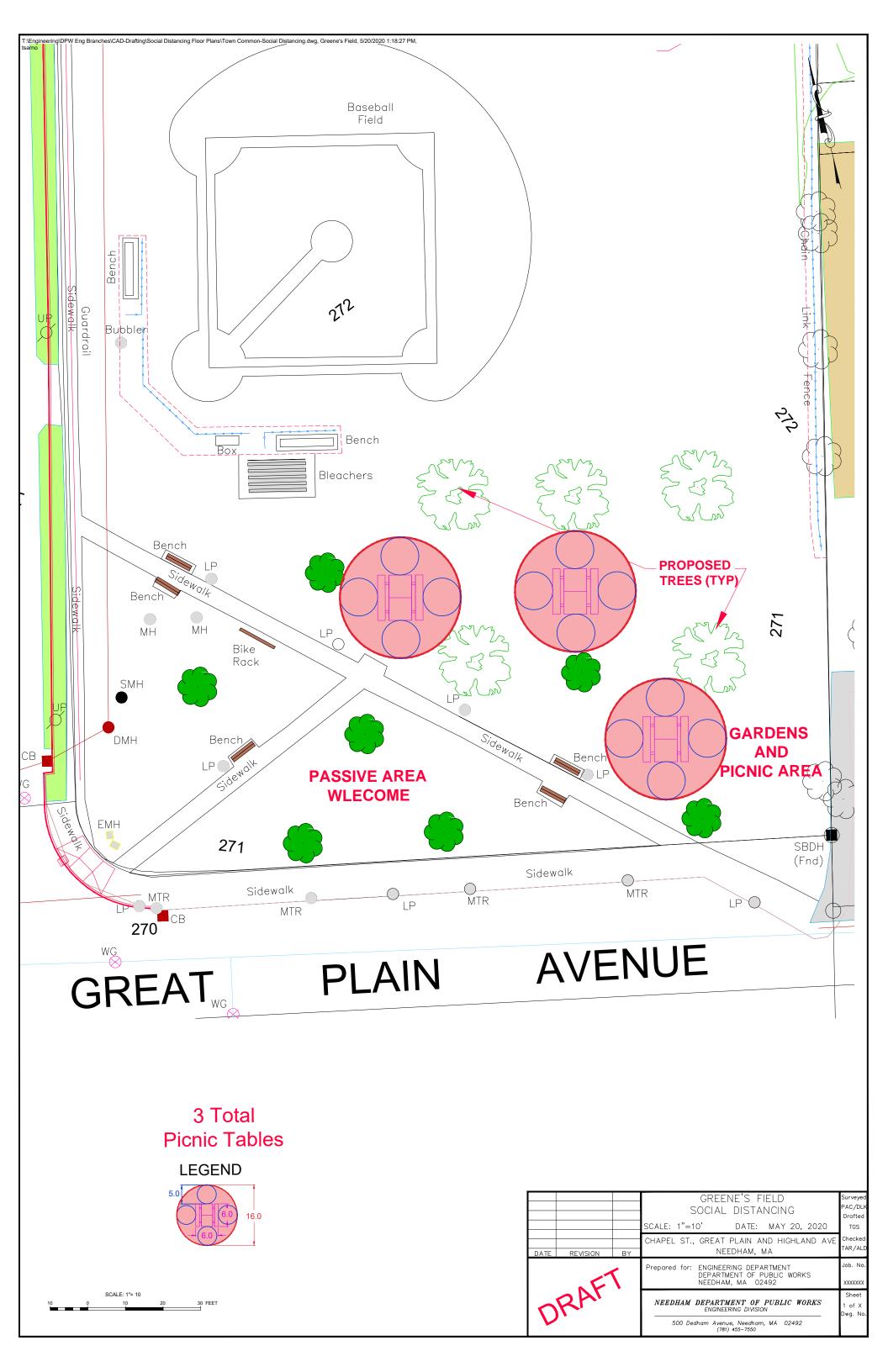
This article originally appeared on the Boston Business Journal's website.

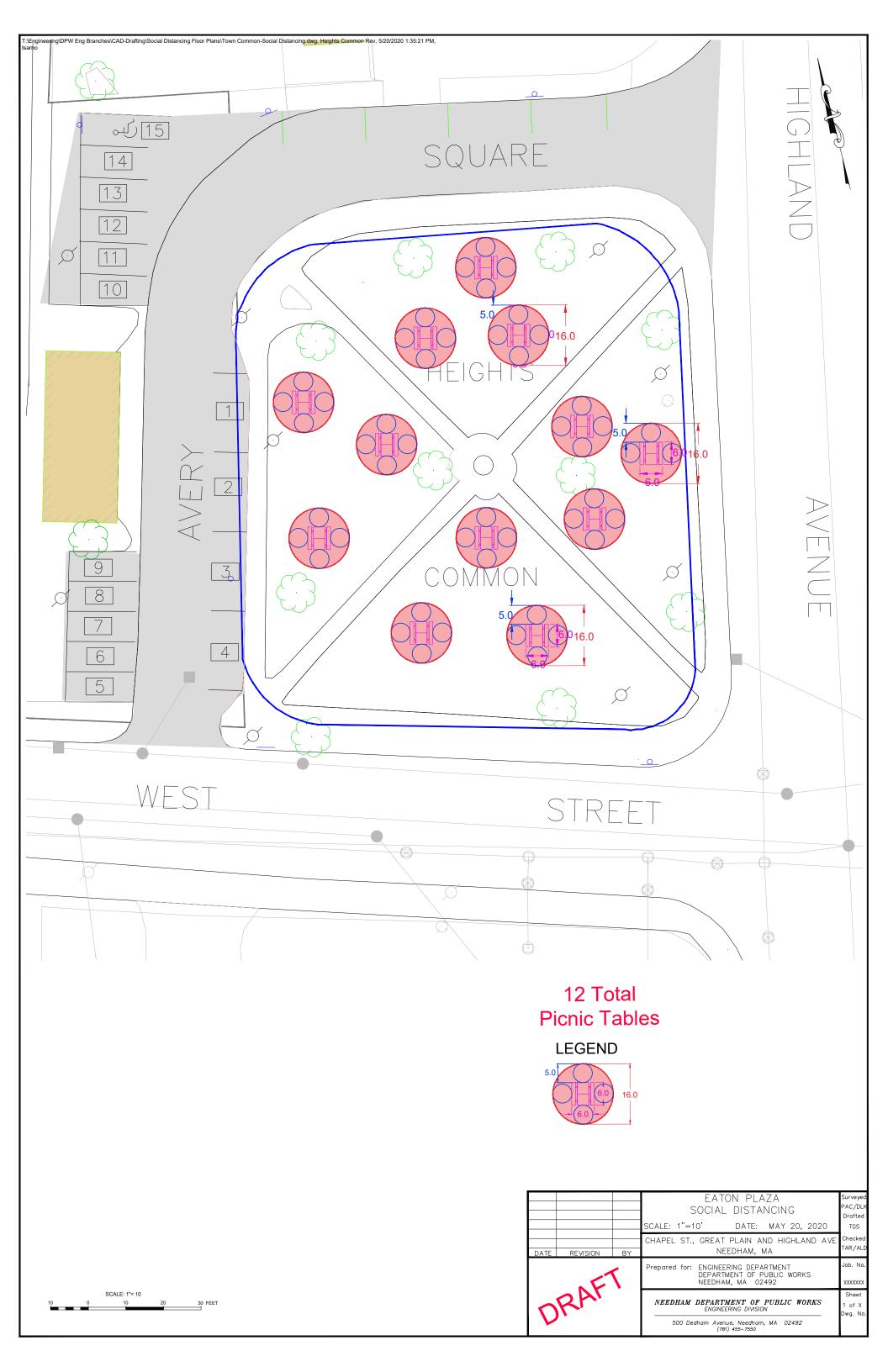
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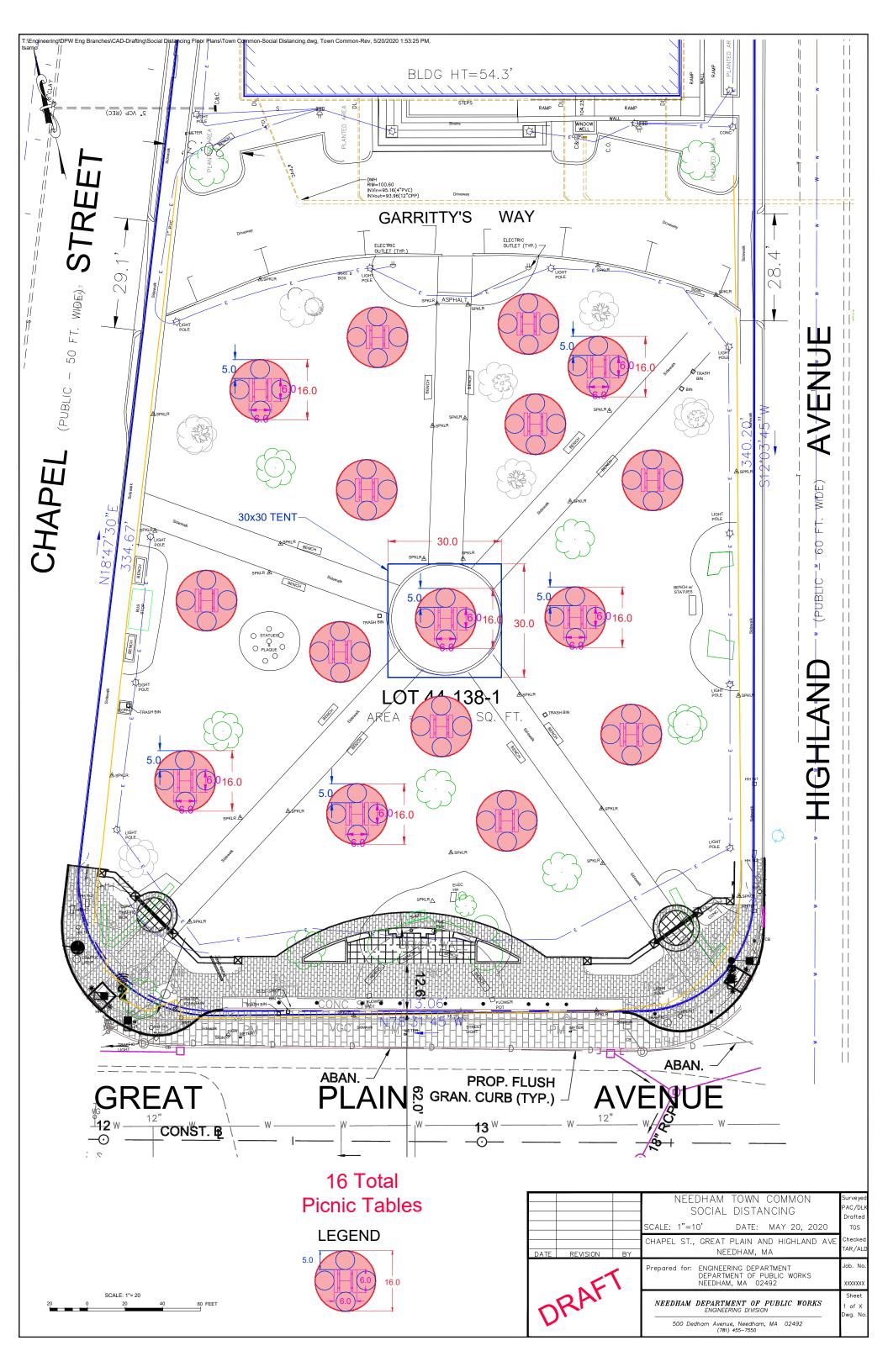


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NEEDHAM PLANNING BOARD MINUTES

February 18, 2020

The regular meeting of the Planning Board held in the Charles River Room, Public Services Administration Building, was called to order by Martin Jacobs, Chairman, on Tuesday, February 18, 2020, at 7:00 p.m. with Messrs. Owens, Alpert and Eisenhut and Ms. McKnight, as well as Planning Director, Ms. Newman and Assistant Planner, Ms. Clee.

Mr. Jacobs informed the public there is a request to continue or postpone the ANR Plan for 766 Chestnut Street until the 3/17/20 meeting. If this agenda item is postponed, Mr. Jacobs will take an update on the Children's Hospital Citizens Petition.

Public Hearing:

7:05 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 hearing has been continued from the February 4, 2020 meeting of the Planning Board.

Mr. Jacobs noted the following additional materials for the record: a letter, dated 2/11/20, from Domenic Colasacco in opposition; a letter, dated 2/11/20, from James Curley in opposition; a letter, dated 2/11/20, from David Kelley, Senior Project Manager for Meridian Associates, attaching revised subdivision plans for the site and describing the vision; Planning Board comments from the last meeting; a 2/14/20 email from Domenic Colasacco and a letter dated today from Marsha Salett in opposition.

George Giunta Jr., representative for the applicant, reviewed the changes made to the plans due to comments from Engineering and comments from the last meeting. For the Engineering comments, the plan was revised to show the culvert under the driveway which <u>changes</u> are on Sheets 5 and 6. Also, the subsurface filtration basin was redrawn to be the size in the drainage calculations. A note was added at the Town Engineers' request regarding overflow into the town system.

Mr. Giunta Jr. noted the changes made due to the Planning Board comments included a change to Lot 2 to carve off a piece in the back (Parcel B), and <u>regarding</u> an existing tree on the property line. The material and be protected. A note was also added that the <u>filtermitt-FilterMitt</u> is to be one foot off the property line. Over 2 acres are to be donated to the town for conservation land. He clarified the list of waivers and the reasons for the requests. He noted this project could be done as of right. Sidewalks on both sides have been consistently waived <u>and a waiver is requested</u>, but there is room to put sidewalks all the way around. The plans are showing a 40-foot wide road with 24 feet of pavement, a 4-foot sidewalk on one side and a planting grass strip on the other side.

Mr. Giunta Jr. stated it was not logical to have 24 feet of pavement to one house. The applicant has proposed a more attractive subdivision with a lot less pavement. This could be done without waivers but it does not make sense. The owner is giving away over 2 acres of land to the town to help preserve the environment. He feels it is an appropriate design with minimal impact and he is asking the Board to approve the request. Mr. Eisenhut noted an issue was raised that the way be moved over. He asked if there was any consideration given to that. Mr. Giunta Jr. stated the road is 11 feet off the property line. The request was the road be moved an additional 10 feet. The lot is being squeezed on the other side and it makes a significant negative impact. The applicant would need to completely redesign the circle and push the swail more into the lot making it difficult to work in that lot. Mr. Eisenhut asked if it would be manageable to move it 2 to 3 feet. Mr. Giunta Jr. stated it may be able to be moved 2 feet but he is not sure of the benefit.

Ms. McKnight noted the movement of the <u>filtermitt-FilterMitt</u> lacks a foot mark. She asked if the dotted line near the rear of proposed Lot 2 is a utility easement right of way. Mr. Giunta Jr. noted it is an easement. It may be a drainage or sewer easements. Ms. McKnight feels the plan should indicate what the easement is for and who holds

it. It seems incomplete and should be shown. Mr. Giunta Jr. believes it may be an old private easement. Mr. Alpert stated there needs to be clarification on that. Ms. McKnight noted one condition is significant trees over a <u>certain</u> caliper need to be noted and saved to the extent possible. There was a discussion of the feasibility of that with these 2 houses. Mr. Giunta Jr. stated typically that is not done due to the cost and it is not required. It is a significant effort and takes days or weeks. He would not recommend his client to do that. The trees are all marked on Sheet 5 and it has the trees to be removed. Ms. McKnight asked if any trees were marked for removal that could be saved. David Kelley, of Meridian Associates, noted there may be a couple that could be saved.

Ms. McKnight noted the letter from Mr. Colasacco requesting as few trees as possible be removed and the Board consider fire access to the rear lot. This has already been considered. The Fire Department reviewed and approved. She asked if there are any fire hydrants. Mr. Jacobs noted one fire hydrant is being proposed. Mr. Alpert stated he is concerned with the comments made by Mr. Curley regarding trees and the property line. He asked if a field survey was done and the property line delineated on the ground. Mr. Giunta Jr. noted this was done recently. Mr. Alpert asked Mr. Giunta Jr. if he would meet with Mr. Curley regarding the property line and the trees and he agreed. Mr. Kelley stated the trees along the property line will be saved and are depicted on the plan.

Mr. Alpert asked if there could be a condition that is agreeable to the abutter regarding a landscape plan that provides screening for the abutter. Mr. Eisenhut stated there will be language in the decision. Ms. Newman stated the Board will require landscaping along the property line and that the requested plan be received before the subdivision plan decision to create a dialogue that would be satisfactory to all. It should be reflected in the decision. Ms. McKnight does not want to see rows of arborvitae. She would like some trees and plantings and some space for snow.

Mr. Alpert asked if the applicant has spoke to the Conservation Commission as to what they would like with Parcel B. Mr. Giunta Jr. noted either a deed or a restriction would be fine with the Conservation Commission. Ms. Newman noted a deed would be best. Mr. Owens stated there are benefits of all waivers. Parcel B is not buildable so there is no value of that piece. All the waivers are done to improve aesthetics and the environmental impact of the subdivision. He asked if there is no benefit to the current property owner from the waivers. Mr. Giunta Jr. noted there is some benefit. The reduction of infrastructure costs is not significant but there is a benefit of reduced pavement.

Mr. Owens feels there is an attempt to disguise a road as a driveway. He is not swayed by the argument. He asserted that Mr. Giunta Jr. has said the Board has made so many waivers as to be irresponsible and they that the subdivision rules have no meaning any longer. He disagrees with that. He would do away with 2 house lots. He does not think this is a good idea and would not vote in favor of the waivers. This is not beneficial to the town and is not aesthetically attractive to the abutters. Only 2 homeowners would benefit. Ms. McKnight noted the letter from Ms. Salette describes the easement as a gas easement.

Mr. Jacobs commented he heard what Mr. Owens said but he disagrees. If Mr. Giunta Jr. is correct this could be done as of right with a wider drive and a larger circle at the end. What is being shown is preferable. He has concerns with the landscaping to the north and south borders of the property. He would be in favor of moving the access drive 2 feet to the south with a slight jog to the right. That could save a couple of trees. He suggested the applicant think about that. All are in favor of reducing impermeability. He asked to what extent could the drive be made out of permeable material. Mr. Giunta Jr. noted there are sections of the drive that are permeable around the circle but not the rest. Engineering prefers not to see permeable pavers for the main drive.

Ms. McKnight stated she likes the suggestion of moving the drive to the south. She would like the drainage system explained and how it goes. Mr. Kelley stated the road is super elevated to the south with a vertical granite curb with the water flowing westerly to the gutter to a double catch basin to a drain manhole to the large subsurface system.

James Curley, of 380 Grove Street and a direct abutter, stated he measured the street. If you take the proposed 8 foot buffer and add 4.5 feet of sidewalk and 3 feet of grass buffer after that you are at 7.5 feet. They have 4 feet of tree that would block the sidewalk and that tree cannot be touched. He asked how the applicant could build the sidewalk. Mr. Jacobs noted that Mr. Giunta Jr. conceded that, as shown, Mr. Curley is probably right but the

applicant can show it. Mr. Giunta Jr. stated essentially, and legally, because the Board has waived sidewalks so often to not do that now would be capricious.

Mr. Curley stated he is concerned with the placement of the road. The applicant has not shown an as of right plan. He does not want a road or driveway near his property line. He does not want the roots of the old trees dug up and disturbed. Mr. Jacobs noted the plan shows a single tree to be protected. Are there other trees on his property? Mr. Curley stated there were at least 3 or 4 with substantial root systems on his land. Mr. Kelley stated the impact to roots is minimal to none. Mr. Jacobs stated all efforts should be made to protect the trees. Mr. Curley stated one lot is entirely in the woods and would be clear cut. He is concerned with his privacy. Domenic Colasacco, a direct abutter on the south side, agrees with Mr. Owens remarks. He wants to reiterate the entire rear part of the property is tall mature trees. A house cannot be built without taking down trees and they will want a yard also. It would be an environmental detriment to the wetlands. The land being given is entirely wetlands and protected. He has been planting trees for 20 years on his property. He would not like to see the property next door clear cut. He feels the entire request is about money. It is far less to build a driveway than a road. This also increases the size of the lots and the value.

Mr. Giunta Jr. stated the buffer zone is halfway into the rear lot. There would be some cutting for the house and yard but there would be no clear cutting. Mr. Kelley stated the 20-foot buffer around the house would not be cut. Mr. Alpert discussed the Conservation Commission rules and regulations. He noted if this is mature growth the applicant would not be allowed to cut in the 50-foot buffer. Mr. Giunta Jr. stated there is no plan to cut within the 100-foot buffer. There is plenty of room to stay outside the buffer. There is a total 3,500 square foot footprint and yard outside with plenty of room. Mr. Colasacco stated the 3,500 square foot footprint is the foundation. He feels it would be cut. He understands there would be certain restrictions but providing the waivers to make the road into a driveway would make all this possible.

Ms. McKnight suggested there be a condition that no trees would be disturbed outside of the tree line shown on the plan. Mr. Colasacco stated the Board may put in a condition but he is concerned trees on his property may be cut. If the Board allows waivers the second house will be built. This should continue to be the single family lot it has been for 100 years. Mr. Alpert stated there is nothing right now to prevent the owner of the lot from tearing down the house, putting in a 7,500 square foot house, cutting down all the trees and putting a driveway to the back. This is always in the back of his mind. He feels the waivers, and putting in conditions, is the better alternative. It is basically a driveway as it is only going to one house. He is concerned with what they could do as of right without coming to the Board.

Mr. Colasacco stated the owner could not put 2 houses there. He is concerned with his privacy. He believes this is a good lot for one house in the front. Nicholas Kourtis, representative for the Badavas', agrees with all the comments. Grove Street is a beautiful street. The screening is a good concept but a low grade alternative. Two story houses would change the nature of the area. People deserve better than that and deserve some consideration in this single family area. The Planning Board should protect the rights they pay for. Mr. Jacobs reviewed the changes that had been talked about – moving the entrance "way" driveway paving 2 feet to the south; investigating a little jog in the road to the rear of the first house to save existing trees; landscape plan working with Mr. Curley and other abutters on the north and south; label the easement and saving trees outside the building envelope.

Mr. Alpert asked what the Planning Board could do if the applicant violates the tree restriction. Ms. Newman stated they would be called in and the Board would find a way to mitigate. Mr. Eisenhut noted it could be recorded as noncompliance. Mr. Alpert stated, subject to reasonability, the Board could hold up the decision if the discussion with the abutters is not done. Ms. McKnight commented the property line is labeled as the approximate property line. Mr. Kelley stated it is a true survey, stamped by a surveyor. He can remove the word "approximate." Ms. McKnight noted there is no tree line. Mr. Kelley will add the tree line to the plan. He could have that done in 2 weeks. Ms. Newman stated she would need to get the plans back so she could prepare the decision.

Upon a motion made by Ms. McKnight, and seconded by Mr. Alpert, it was by the five members present unanimously:

VOTED: to continue the hearing on 390 Grove Street to 3/17/20 at 8:30 p.m.

ANR Plan – 766 Chestnut Street, LLC, Petitioner (Property located at 766 Chestnut Street, Needham, MA).

Mr. Jacobs noted a letter from Attorney Robert Smart requesting to postpone until the 3/17/20 meeting and extend the action deadline to 3/24/20.

Upon a motion made by Mr. Alpert, and seconded by Ms. McKnight, it was by the five members present unanimously:

VOTED: to extend the action deadline to 3/24/20 and postpone the meeting until the 3/17/20 meeting.

Report from Planning Director and Board members.

Tim Sullivan, representative for Children's Hospital, stated he has a Citizen's Petition to allow pediatric medical facility use and has also proposed a parking standard. The Board desired a special permit use. The expectation is before the public hearing he would submit information on the parking standard, then it would be sent to a peer reviewer. For traffic, he expects to submit a trip generation analysis to be reviewed by the Board. Then he would come in to amend the special permit and will have the traffic study. He wants to make sure all are on the same page.

Mr. Jacobs stated Ms. Newman met last Friday with Board members—Chair and Vice Chair and Town Engineer Anthony DelGaizo, who has concerns regarding traffic at Third Avenue and Kendrick Street. There would need to be a substantial upgrade. They spoke about what the scope of work would be with Beta. Ms. Newman asked Beta to do a scope of work for a parking peer review and traffic analysis with use and trip generation. They are collecting new data as the other data is 5 years old. They are looking at the impact of development, what improvements would need to be done and the cost of those improvements. Mr. Jacobs stated Beta came up with a proposal. The second part has a significant cost. Children's Hospital would prefer not to do that now. What does the Board want to say at Town Meeting?

Mr. Sullivan stated Beta cannot do a traffic study on information they do not have. He feels this is the right level of analysis. Mr. Alpert is concerned where the Finance Committee will come down if they cannot get a traffic study. Mr. Eisenhut suggested it be explained at Town Meeting there is no special permit application but a zoning change and show the existing use and what the proposed would do. It is at the applicant's risk. Mr. Alpert is confident the traffic could be mitigated at the special permit level.

Ms. McKnight noted the concern was that questions would be asked about what traffic improvements would be needed. Normandy said they would pay for the Kendrick Street improvements. Mr. Jacobs noted that was an oral representation by someone that is no longer there. Mr. Alpert stated the town needs to spend \$1.5 million to \$2 million to fix the intersection. Someone has to spend it. He asked if it has anything to do with what Children's Hospital needs to do. It needs to be reconfigured. It could be said to Town Meeting that they could pass the zoning but it would not force a reconfiguration at Third Street and Kendrick Street.

Mr. Owens stated if Mr. Sullivan is willing to accept the risk that is fine. He is willing to let Children's Hospital accept the risk but he has no idea what will happen. Mr. Sullivan stated he is submitting a trip analysis. There is a traffic study they are comparing this use to. Mr. Alpert suggested Children's Hospital address the issue when they are making their presentation. Ms. Newman noted Task 3 needs to be modified a little. One question was how much <u>floor area</u> was general office as opposed to medical office. Mr. Jacobs stated, as guidance for the Planning Director, the parking evaluation is Task 1 and Task 3 needs to be reevaluated a little bit.

Determination of Proposed Use – Self Storage (Property located at 77 Charles River Street, Needham, MA.

Paul Ferreira, of Blue Hawk, stated he was here many months ago to see if they had an acceptable use. He came across a use application and came to get some guidance if the use is acceptable. He prepared an analysis and submitted it recently. He noted the project has not changed. He got an inquiry by a telecommunication carrier recently and configured it to be identical to the self storage because the use is similar but there is no parking

definition—in. He would like a determination that the portion of the project that is self storage would be a use allowed by special permit in this district. Self storage has not been a use enumerated in the By-Law.

Mr. Jacobs noted he was looking at (e), the last paragraph in Section 3.1 in the By-Law. The Planning Board could determine similar in kind and similar in use. What use allowed by special permit, in this use, are you comparing to? Greg Sampson, of Brown Rudnick LLP, noted (e), which is equipment rental services, and he would also compare it with the telecommunication use which is a passive use. The traffic impacts are benign. A parking garage is allowed by <u>use-special permit</u> and consumer services establishment is acceptable. Also, (i) wholesale distribution facilities.

Mr. Alpert stated the word "storage" was purposely removed in the Mixed Use 128 District. People said they did not want to see facilities like Gentle Giant. Mr. Sampson stated Watertown just approved storage use. The opponents were about aesthetics. When you look at uses, traffic needs to be looked at closely. In Watertown the design and low passivity of the use was what passed it. He feels a self storage facility is similar in kind to other listed uses. Mr. Jacobs noted the following correspondence for the record: the minutes of 10/22/19; a memo from Ronald Ruth dated 2/15/19 and 10/17/01 minutes from the New England Business Center Sub Committee meeting. Mr. Alpert stated those are the minutes where the word "storage" was taken out. Mr. Jacobs also noted the Council of Economic Advisors (CEA) minutes of 12/5/18, CEA minutes from 5/1/19 and a letter received today from William Curtis from Cresett Group.

Mr. Eisenhut stated he appreciates the aesthetics of design but there are many reasons storage is not intended in this district. Mr. Sampson stated Mr. Curtis does not own any property in the Mixed Use 128 District. He has spoken with the abutters and received support. There are only 4 landowners in Block A. He has reached out to 40% of the landowners and all owners in Block A and could not make a deal. He is not sure why this use is not acceptable and similar. Mr. Ferreira stated he is not looking to get it approved as an as of right use.

Mr. Jacobs noted, speaking for himself, he likes this and thinks it would work but they need to find a way to make it fit in the By-Law. After a discussion Mr. Ferreira asked, in the Board's view, if they scrap storage and come forward with telecommunication would that be ok. Mr. Alpert stated that was an allowed use. Mr. Eisenhut stated storage use is not called out and he could not get past that. Mr. Ferreira commented he is relying more on similar in impact. He feels it is hard to believe anyone would say telecommunication is similar in impact to self-storage. Mr. Alpert noted storage was deliberately taken out and it is hard to get past that. He likes the design and wishes it could work.

Mr. Ferreira asked if going to Town Meeting with a Citizen's Petition is a potential option and was informed it was. He asked if the Board would support a zoning change. Mr. Jacobs stated if the details are there the Board would support it. What would the zoning change be? Would they be adding storage or specifically self-storage? He stated there would have to be meetings and the applicant would have to make a request to the Board in some form that they adopt as the Planning Board Article at the next Town Meeting. That would start the process. He feels there should be discussion about retail on the first floor.

Ms. McKnight stated, in her view, she does not feel any of the uses mentioned are similar in kind to self-storage. The argument is that storage was purposely taken out because no one intended that use. She does not feel anyone felt this use is appropriate. That is a use allowed by right in many areas of town but not this area. Mr. Jacobs stated the applicant should submit the proposed zoning amendment language, then something in writing that convinces the Board it is a good idea and the aesthetic standards. This will be continued to the April 7 meeting.

Discussion of Highland Commercial 1 Zoning initiative.

Ms. Newman stated she wanted to have Mr. Owens in on this conversation. There was a discussion last week on next steps. The discussion regarded taking the current foundation, making the change that had been discussed and going with the traffic and fiscal impacts. She feels it would be important to have more conversation. Mr. Owens noted it was decided not to go forward in the Spring or Fall. He wants to make sure the Board keeps working on it

and not put it aside. The Finance Committee was updated on the Planning Board's decision and emphasized they want a timely and complete traffic study.

Ms. McKnight asked if the Board knew what the state will be doing as to Highland Avenue and, if so, will there be a presentation on it. Ms. Newman noted the Planning Board has the plans for that. She can have Town Engineer Anthony DelGaizo come in and inform the Board. Adam Block, of the Needham Heights Business Association, stated the Association has organized a community meeting with Town Manager Kate Fitzpatrick and the Mass Department of Transportation to update. They are on schedule to begin later this year. The community meeting will be Monday, March 23 at 7:00 p.m. at Powers Hall. Ms. McKnight noted there should be a presentation to tell what the state is going to do. Mr. Block will discuss with the Town Manager what materials are needed and what the presentation will be. Mr. Owens stated he would like to hear the state tell the Board what they are doing. Mr. Jacobs commented the state installed cameras on the town lights without approval.

Update on Economic Development Director.

Mr. Jacobs noted this was discussed at the last meeting. The position description needs to be finalized. Town Manager Fitzpatrick does not want this to be supervisory and wants to put it under her own purview. Mr. Alpert thinks it is the Town Managers' decision. The position—Economic Development Director—does not work for the Planning Board but reports to the Council of Economic Advisors (CEA) and the CEA reports to the Select Board. Ms. Newman stated towns have both structures and she is fine either way. Ms. McKnight agrees. Her view is she feels it belongs in the Planning Department but if Ms. Newman is ok with it that is fine. Mr. Jacobs stated he has no strong objection for the Planning Board.

Appointment to Emery Grover Working Group.

Ms. Newman stated this is almost done but the working group wants Planning Board input. It is not a large time commitment. Mr. Alpert stated he cannot be the representative but would like to see the draft report. Ms. McKnight asked why not have the whole Board involved? She will be available if they want to follow up.

Minutes

Upon a motion made by Ms. McKnight, and seconded by Mr. Alpert, it was by the five members present unanimously:

VOTED: to accept the minutes of 10/28/19 and 12/3/19.

Ms. McKnight noted a change on the 10/22 minutes, 4th page under the 7:40 p.m. discussion, it should say "He asked if a special permit process is what they should embrace." On the 2nd page, under the 7:20 p.m. discussion, remove the sentence that says "He has about 6,000 square feet of retail in the area." On the 3rd page, 2nd paragraph, 3rd line, add "has" before "very few employees." On the 4th page, 2nd paragraph, it should say "a pilot agreement would be a condition of that," and 3rd paragraph, last line, it should say "7 spaces per thousand square feet."

Upon a motion made by Ms. McKnight, and seconded by Mr. Alpert, it was by the five members present unanimously:

VOTED: to accept the minutes of 10/22/19 with the changes discussed.

Upon a motion made by Mr. Alpert, and seconded by Ms. McKnight, it was by the five members present unanimously:

VOTED: to adjourn the meeting at 10:30 p.m.

Respectfully submitted,

Donna J. Kalinowski, Notetaker

Jeanne S. McKnight, Vice-Chairman and Clerk

NEEDHAM PLANNING BOARD MINUTES

March 6, 2020

The regular meeting of the Planning Board held in the Charles River Room, Public Services Administration Building, was called to order by Martin Jacobs, Chairman, on Tuesday, March 6, 2020, at 8:32 a.m. with Messrs. Owens, Alpert and Eisenhut and Ms. McKnight, as well as Planning Director, Ms. Newman and Assistant Planner, Ms. Clee.

ANR Plan – Rami Assaad and Rania Assaad, 348 West Street, Needham, MA, Petitioner (Property located at 348 West Street, Needham, MA).

Evans Huber, Counsel for the applicant, stated his clients own 2 pieces of property. The small unimproved lot is 10,000 square feet. The larger lot is ell-L-shaped and has an existing 2 family house. This application will reconfigure the lots so a section behind the smaller lot becomes part of the larger-smaller lot. The effect will be the now smaller lot would become larger and be better suited to building a house. This would allow the house to be set further farther back from the street. Both lots are conforming as to size requirements. He noted the exiting house and garage are staying.

Mr. Jacobs clarified there is a note on the plan that says the endorsement is not a determination as to conformance with zoning regulations. He noted the following correspondence for the record: a letter, dated 1/3/20, from Town Counsel David Tobin regarding 12 & 18 Brookside Road and a letter, dated 2/28/20, from Town Counsel David Tobin regarding this property. Both letters say ANR endorsement is appropriate. He commented the front porch is within the 14 foot setback of the side lot line and he added comments. Mr. Alpert noted, for full disclosure, he represented the prior owner of this property. The existing house is pre-existing, nonconforming due to its 2 family status. Town Counsel Tobin's letter concludes that the ANR does not affect the pre-existing, nonconformity.

Ms. McKnight stated she is concerned that if the pre-existing, nonconformity is preserved the owner could go to the Zoning Board of Appeals (ZBA) with a proposal for reconstruction of the 2 family house. Could there be a condition? Mr. Alpert noted that, if an application were made, the ZBA needs to find the proposed 2 family is not more detrimental and the Planning Board would have input. Mr. Eisenhut stated he would defer to Town Counsel. Attorney Huber stated he understands the concern but Town Counsel has made his determination and the applicant has no further plans.

Upon a motion made by Mr. Alpert, and seconded by Ms. McKnight, it was by the four members present unanimously:

VOTED: to accept the application for the Approval Not Required plan.

Minutes

Mr. Jacobs noted there were 3 sets of draft minutes. If the members had any changes the changes should be passed to Ms. Clee.

Correspondence

Mr. Jacobs noted a copy of a letter from Planning Director Lee Newman to Assistant Town Manager Dave Davison regarding the Gift from Children's Hospital to the Town to cover the cost of a Parking and Trip Generation Evaluation for Children's Hospital, Founder's Park. Ms. Newman stated she has the check and has contacted BETA. They have Beta has begun a peer review traffic study. Technically she is waiting the Town's acceptance of the gift, which will be approved next Tuesday.

Ms. Newman stated she attended a meeting with Town Manager Kate Fitzpatrick, and the attorneys representing the Town, who recommended the Planning Board include a condition that links the Special Permit to the Terms of the Pilot Agreement. They feel it is important to run with the land and be perpetual in nature with a 30 year time

line. That is the goal and the Town Manager wanted to know if the Planning Board is ok with that. Mr. Jacobs asked if Children's Hospital is aware of footer that condition. Ms. Newman stated Children's is not aware of the details. They understand what is trying to be accomplished but there has not been a meeting yet. All members of the Board are in favor that this should be a condition of the permit. Ms. McKnight stated she would like another means to have at least a 30 year enforcement in case there is an issue with that. Mr. Eisenhut noted it should be 30 years or as may be extended. All agree. Mr. Jacobs noted a memo to Rachel Glisper, Director of Human Resources for Needham, from Town Manager Kate Fitzpatrick, regarding the Economic Development Manager posting.

Mr. Jacobs noted a copy of the proposed ADU-ZBA Special Permit Application. Ms. Newman stated Daphne Collins is working with Building Inspector David Roche to get all the information up front, specifically how the relationship issue has been handled. She would like the Board members to review and give her any comments by next week. Mr. Jacobs noted a copy of the By-Laws as approved by the Attorney General.

Report from Planning Director and Board members.

Ms. Newman stated she met with Jeff Friedman, of the Farmer's Market. He would like to expand the Farmer's Market onto the common and increase the number of vendors by four. This would be an amendment to the special permit. They also want to do some unloading on Highland Avenue and start unloading an hour earlier. She asked if this would be a deminimus change or a full amendment. She feels it could be deminimus. The DPW is reviewing the off loading. Mr. Jacobs stated the applicant would need to negotiate the additional space with the Town. Ms. Newman noted it is being done concurrently. There needs to be a new agreement with the Town and the Special Permit needs to be changed. This is only being done for one year, then the common will be renovated and the market will be displaced. The Board members had no issue with this as a deminimus change.

Adam Block stated loading and unloading on the common could have a detrimental effect on the landscape. He asked if there is a responsibility on the part of the applicant to preserve and if they do not that they would be financially responsible to the Town. Mr. Jacobs stated that would have to be negotiated with the Town in their its agreement with the Select Board but he expects the Town will have that as a condition in their agreement. Ms. Newman stated there have already been some conversations held regarding where the tables would be and the customers would be on the walkways. Mr. Eisenhut noted the application is incorporated into the Special Permit.

Ms. Newman noted NBC has offered tours of the facility. She asked if any members would be interested. Ms. McKnight and Mr. Jacobs would like to tour the facility. Mornings are best for all members. Ms. Clee will schedule a date and time and notify the Board members.

Ms. McKnight noted an article in the Needham Times regarding the train quiet zone. There is a group of people, led by Carlos Rodriguez and his wife, Sara, who began a website to encourage people to get in touch with the Select Bboard members and their state representative. This was on the Select Bboard agenda and basically the Town's goal of working toward a quiet zone; was ended. She noted there are 2 ways to improve this – median barriers which the Selectboardmen vetoed. The other way is 4 way gates which is more costly. The cost was \$1.3 million when it was discussed previously. The Selectboardmen has now ve closed the door. She is receiving a lot of calls and there is a lot of upset in the town. She would like to know what the Board members feelings are on this. She feels this is a health issue for a lot of people as they cannot sleep through the horns that blast first thing in the morning and very late at night. She is surprised by the Selectboard's resistance and wants guidance from the Planning Board.

Mr. Eisenhut stated the hope is to connect the Rail Trail to the Newton line using the right of way as a pedestrian and cycle path. The train from Needham Heights through Needham Center would have to be discontinued. This is in the back of the Select Board members'men's minds. Mr. Alpert stated the intersections at Oak Street and Great Plain Avenue are very loud. Ms. McKnight noted the Needham Times article has information from the MBTA who say they have no plans for train service changes. Mr. Jacobs stated the Planning Board is already on record as being in favor of pursuing the quiet zone. Guidelines for doing this are already in place. There is a question of doing it. Chances of it happening are slim in his view.

Mr. Block stated he met with Mr. Rodriguez and others who are strong advocates to form and implement a movement. They feel they have been aggrieved by the process. It would make sense to do an updated study. He attended the Select Bboard meeting. There was a discussion and then a vote to take no action. It may be a misperception on the part of the group that the Select Bboard voted to kill the issue in finality. Ms. McKnight noted Town Manager Kate Fitzpatrick informed her the Select Bboard voted to take no action. Mr. Block thought it was to take no action at this time. The residents feel particularly aggrieved and are not getting any satisfaction from the town. Mr. Jacobs stated the question is, as a Board, do they want to take a position? He asked if there is time to get this on the 3/17 or 4/7 agenda to discuss. It will be put on the 4/7/20 agenda for discussion. Mr. Block will reach out to Mr. Rodriguez. Ms. Newman will also reach out and plan it.

Upon a motion made by Mr. Alpert, and seconded by Ms. McKnight, it was by the four members present unanimously:

VOTED: to adjourn the meeting at 9:15 a.m.

Respectfully submitted, Donna J. Kalinowski, Notetaker

Jeanne S. McKnight, Vice-Chairman and Clerk

NEEDHAM PLANNING BOARD MINUTES

March 19, 2020

The regular meeting of the Planning Board held in the Charles River Room, Public Services Administration Building, was remotely called to order by Martin Jacobs, Chairman, on Tuesday, March 19, 2020, at 8:32 a.m. with Messrs. Owens, Alpert and Eisenhut and Ms. McKnight, as well as Planning Director, Ms. Newman and Assistant Planner, Ms. Clee.

Endorsement of ANR Plan – Jason Koshnitsky and Alina Kirzner, Petitioners (Property located at 142 Hunnewell Street, Needham, MA).

Ms. Newman stated this is a lot line adjustment between 2 properties. Lot 2B will be incorporated into the house at 142 Hunnewell Street. Both lots have the required frontage on a way and meet all lot and setback requirements. Lot G1 will be combined with 2B and Lot G2 will be combined with 2A.

Upon a motion made by Ms. McKnight, and seconded by Mr. Alpert, it was by the five members present unanimously:

VOTED: to endorse subdivision approval not required.

<u>Request to Extend Action Deadline on ANR Plan – 766 Chestnut Street, LLC, Petitioner (Property located at 766 Chestnut Street, Needham, MA).</u>

Ms. Newman noted a letter from Attorney Robert Smart, representative for the applicant, requesting an extension to the first meeting in May and extending the action deadline to 5/31/20.

Upon a motion made by Mr. Eisenhut, and seconded by Mr. Alpert, it was by the five members present unanimously:

VOTED: to extend the action deadline to 5/31/20.

Review and Approval of Highway Commercial 1 Zoning work plan.

Mr. Jacobs noted there is a problem with the work plan schedule, which was premised on Engineering doing new traffic counts. There will be no traffic counts done now until the traffic returns to normal. Ms. Newman stated she worked with the Town and contracted with a company to do the scope of work. All new counts were required. She was working out the final details of that scope when the Corona Virus happened. New counts would be no good at this time. There were some counts done earlier for 2 of the locations, which were the intersection of Highland and Gould and the intersection of Gould and Central. She asked if it would make sense to delay this to get more comprehensive information. The assumption embedded does not allow housing. She asked if the Board wants to take that off the table or add it as a variable.

Ms. Newman noted the Board could move forward with the schedule with no new counts and relying on the existing counts out there. She noted the Town will be going to remote zoom meetings. The new online permitting process was scheduled but that is not going forward at this time. The Planning Department is scrambling to put together pieces to accept applications, post meetings and the review process. She asked what the Board views as priorities. Children's Hospital will be coming in. There will also be the Avery Square rehab with zoning changes, potential office on Highland Avenue and a proposed subdivision for Robert Smart off Dedham Avenue.

Mr. Owens noted no one knows when or how this will end. Theoretically the current traffic counts are ok with him. He feels the Board needs to have a conversation with the Finance Committee. If the Board decides to delay because we believe we will be able to get accurate counts later there is a lot of risk. A theoretical analysis may not be satisfactory for the Finance Committee, which would be a dilemma. Mr. Alpert stated the traffic study needs to be delayed into the Fall. There will not be anything approximately what would be normal traffic until September or October. He feels the Board should deal with this in the Fall. Mr. Eisenhut agreed.

Ms. McKnight stated the Board needs an updated traffic study. There will be traffic changes when the Add-A-Lane is completed. She asked if there is any idea when the traffic will be impacted by the Highland Avenue project? She is concerned if that would be a factor. If that is not a factor she does not see why the decision to engage a traffic consultant cannot be put off until May. She believes the dates could be shifted with the traffic and the study could be done at the end of September. She stated the timing works if everything is just pushed off. She feels the traffic studies should be done.

Ms. Newman stated the estimate to do the work came in higher than expected. Some locations do not feel necessary. She will put in a request for the funds on the Special Town Meeting Warrant so the money will be there when it can go forward. Originally the consultant was asked to model at 1.35 FAR with a split between office and research and development. Another example could have housing with a mixed use. She would like to finalize next steps.

Mr. Jacobs asked if anyone wanted to remove residential housing. Mr. Owens stated he would need more information on that. He wants a firmer grasp on where that is going politically. He continues to believe this is not a site for residential. He knows some Town Meeting members and a couple of Select Board members keep raising this issue. The Planning Board decided years ago this was not an appropriate site for residential. He feels it is a big mistake to go the residential road.

Ms. Newman stated she would like to make sure Mr. Owens is looking at the entire site. One option could be for the housing to be located on the Channel 5 site closer to the MBTA right of way and the residential neighborhoods. Mr. Owens has thought about that. He sees no reason to believe Channel 5 is going anywhere and residential on that site would have to exit at Gould and Highland or Gould and Central. He does not want to put on that extra traffic burden. Mr. Jacobs stated it currently includes residential and asked if the Board wants to keep that included. Mr. Eisenhut stated the study should include the option. It may show it would increase traffic.

A motion was made to say the study should include residential. Ms. McKnight noted it should say "zoning would likely not include housing due to the traffic impact which is to be studied." Mr. Alpert stated this is the scope of work for the GBI traffic study and not for Town Meeting. He is open to Mr. Owen's opinion but is keeping an open mind.

Upon a motion made by Mr. Eisenhut, and seconded by Mr. Alpert, it was by four of the five members present (Mr. Owens voted in the negative):

VOTED: to say "the zoning would likely not include housing due to the traffic impact which is to be studied."

Mr. Jacobs noted the schedule presented would be revised.

Report from Planning Director and Board members.

Ms. Newman gave a recap of where the department is. She noted the Children's Hospital meeting scheduled for 4/15 will probably be held remotely. Ms. McKnight gave an update on the Legislature's vote regarding Town Meetings and allowing the Town Moderator to postpone Town Meeting.

Upon a motion made by Mr. Alpert, and seconded by Ms. McKnight, it was by the five members present unanimously:

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

Respectfully submitted, Donna J. Kalinowski, Notetaker

Jeanne S. McKnight, Vice-Chairman and Clerk