

SELECT BOARD

6:00 p.m. December 22, 2020

Needham Town Hall

Revised Agenda

Under Governor Baker's emergency "Order Suspending Certain Provisions of the Open Meeting Law G.L. c. 30A, S20", issued March 12, 2020 and in effect until termination of the emergency, meetings of public bodies may be conducted virtually provided that adequate access is provided to the public.

To listen and view this virtual meeting on a phone, computer, laptop, or tablet, download the "Zoom Cloud Meeting" app in any app store or at www.zoom.us. At the above date and time, click on "Join a Meeting" and enter the meeting 89093905788 or click the link below to join the webinar: <https://us02web.zoom.us/j/89093905788>.

	5:15	Executive Session Exception 6 – Acquisition of Real Property
	5:45	Informal Meeting with Citizens <i>One or more members of the Select Board will be available between 5:45 and 6:00 p.m. for informal discussion with citizens. Because of planning constraints during the COVID emergency, residents wishing to speak during that time should call the Select Board Office at (781)-455-7500, extension 204, not later than 3PM on the business day before the meeting to request an appointment. This enables the Board to better assure opportunities for participation and respond to citizen concerns.</i>
1.	6:00	Public Hearing: Eversource Energy Grant of Location- George Aggott Road Maureen Carroll, Eversource Energy Representative
2.	6:05	Hazard Mitigation Plan - Kim Donovan, Compliance Coordinator, Dept. of Public Works - Michael Lethin, Emergency Management Administrator
3.	6:15	COVID-19 Update Tim McDonald, Director of Health & Human Services
4.	6:30	Director of Public Works 2020 Public Water System Award - Tree City USA – 25th Year - How the RTS Has Adapted to COVID-19 Protocols
5.	6:50	Town Manager - COVID-19 Expense Update - Budget Priorities - Approval of FY2021 – FY2022 Goals

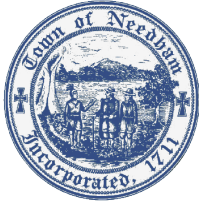
		• Approve the FY2022 – FY2026 Capital Improvement Plan • CPA Project Requests Review & Endorsement
6.	7:15	Board Discussion • Committee Reports

APPOINTMENTS

1.	Needham Council for Arts and Culture	Samantha Hoff (term expires 6/30/2023)
2.	Needham Council for Arts and Culture	Heather Simmons (term expires 6/30/2023)
3.	Golf Course Advisory Committee	Paul Brockmann (term expires 6/30/2023)

CONSENT AGENDA *=Backup attached

1.	Accept the following donations made to the Needham Health Division's Gift of Warmth Fund: \$100 from Philip & Lynda Coburn, Needham residents; and \$100 from Shahin Solisagafi, a resident of Maryland.
2.	Accept the following donations made to the Needham Community Revitalization Trust Fund: \$1000 from ND Donuts, LLC and \$500 from the Petrini Corporation.
3.*	Water and Sewer Abatement Order #1301.
4.	Accept the following donations made to the Vietnam Veterans Memorial Maintenance Donate Fund: \$100 from Mrs. Lena Sostilio, \$25 from Harold & Carol Gershman, \$100 from Joseph Curtin, and \$100 from the LT Manson H. Carter Post 2498 VFW.
5.*	Approve Open Session minutes of 11/24/2020, 12/1/2020, & 12/8/2020; and Executive Session minutes of 11/1/2020 & 12/1/2020.
6.	Approve the display of the "Needham Needs You" banner on Town Hall for a period of six weeks.

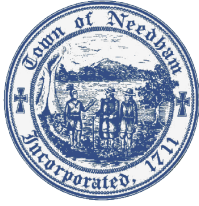


**Select Board
TOWN OF NEEDHAM
AGENDA FACT SHEET**

MEETING DATE: 12/22/2020

Agenda Item	Executive Session
Presenter(s)	

1.	BRIEF DESCRIPTION OF TOPIC TO BE DISCUSSED
Exception 6: Purchase, Exchange, Lease or Value of Real Property	
2.	VOTE REQUIRED BY SELECT BOARD
<u>Exception 6:</u> To consider the purchase, exchange, lease, or value of real property if the chair declares that an open meeting may have a detrimental effect on the negotiating position of the public body. The Board will reconvene in open session at 6:00.	
3.	BACK UP INFORMATION ATTACHED
(Describe backup below) none	



**Select Board
TOWN OF NEEDHAM
AGENDA FACT SHEET**

MEETING DATE: 12/22/2020

Agenda Item	Public Hearing: Eversource Energy Grant of Location –George Aggott Road
Presenter(s)	Maureen Carroll, Eversource Energy Representative

1.	BRIEF DESCRIPTION OF TOPIC TO BE DISCUSSED
Eversource Energy requests permission to install approximately 8 feet of conduit in George Aggott Road. This work is necessary to provide underground electric service to 26 George Aggott Road, Needham. The Department of Public Works has approved this petition, based on Eversource Energy’s commitment to adhere to the Town’s regulation that all conduit installed must be 3” schedule 40 minimum; and, that when buried, the conduit must be placed at 24” below grade to the top of the conduit.	
2.	VOTE REQUIRED BY SELECT BOARD
Suggested Motion: Move that the Select Board approve and sign a petition from Eversource Energy to install approximately 8 feet of conduit in George Aggott Road. This work is necessary to provide underground electric service to 26 George Aggott Road, Needham.	
3.	BACK UP INFORMATION ATTACHED
(Describe backup below) a. DPW Review Sheet b. Letter of Application c. Petition d. Order e. Petition Plan f. Notice Sent to Abutters g. List of Abutters	

TOWN OF NEEDHAM
PUBLIC WORKS DEPARTMENT

P.O. Box 920364 NEEDHAM, Ma. 02492 Telephone: (781) 455-7550
www.needhamma.gov/dpw

TO: Nikki Witham, Selectmen Office
FROM: Judy Laffey, DPW Office
DATE:
RE:

For Selectmen Meeting of
Abutters list & labels at Assessors Office.

Please email confirmation date & time of hearing

GRANT OF LOCATION PETITION REVIEW

DATE OF FIELD REVIEW: 12-10-20

REVIEWER: RAWAN.

SITE LOCATION: #26 GEORGE AGGOTT ROAD

UTILITY REQUESTING: EVERSOURCE

Conduit Work Area Description

☒ A Sidewalk/Grass Strip Crossing Only

Peer Review tar 12/14/20

B Work Within Paved Road Perpendicular Crossing

Peer Review _____

C Work Within a Plaza Area/Landscaped Island/Parallel Along Roadway

Peer Review _____ Div. Head Review _____

D Other

Peer Review _____ Div. Head Review _____

☒ Petition Plan Consistent with Field Review

☐ Old Pole Removed. N/A

☒ Diameter of Conduit

☐ Cables Transferred to New Pole N/A

☒ Depth of Conduit

☐ New Riser on Pole NO

☒ Utility Conflicts

☐ Visible Trench Patch across Road/Sidewalk NO

☒ Crossing Perpendicular to Road

☐ Abutters List Complete

☒ Public Road

☒ Photos Included

☐ Double Pole N/A

Department Head _____

COMMENTS:

THIS ONE LOOKS GOOD TO ME. NO TRENCH
NO RISER ON POLE AS YET.

OKAY TO PROCEED.
TAR



200 Calvary Street
Waltham, Ma 02453

December 8, 2020

Select Board
Town Hall
1471 Highland Avenue
Needham, MA 02192

RE: George Aggott Road
Needham, MA
W/O #2415034

Dear Members of the Board:

The enclosed petition and plan are being presented by the NSTAR ELECTRIC COMPANY dba EVERSOURCE ENERGY for the purpose of obtaining a Grant of Location to install approximately 8 feet of conduit in George Aggott Road.

The reason for this work is to provide electric service to 26 George Aggott Road.

If you have any further questions, contact Maureen Carroll at (781) 314-5053.
Your prompt attention to this matter would be greatly appreciated.

Very truly yours,

Richard M. Schifone

Richard M. Schifone, Supervisor
Rights and Permits

RMS/jc
Attachments

**PETITION OF NSTAR ELECTRIC COMPANY dba EVERSOURCE ENERGY
FOR LOCATION FOR CONDUITS AND MANHOLES**

To the **Select Board** of the Town of **NEEDHAM** Massachusetts:

Respectfully represents **NSTAR ELECTRIC COMPANY dba EVERSOURCE ENERGY** a company incorporated for the transmission of electricity for lighting, heating or power, that it desires to construct a line for such transmission under the public way or ways hereinafter specified.

WHEREFORE, your petitioner prays that, after due notice and hearing as provided by law, the Board may by Order grant to your petitioner permission to construct, and a location for, such a line of conduits and manholes with the necessary wires and cables therein, said conduits and manholes to be located, substantially as shown on the plan made by **T. Thibault, dated December 03, 2020**, and filed herewith, under the following public way or ways of said Town:

**George Aggott Road- Southeasterly from pole 151/3, near the
intersection of Sutton Road, a distance of 8 ±
feet – conduit**

W/O #2415034

**NSTAR ELECTRIC COMPANY
dba EVERSOURCE ENERGY**

By: *Richard M. Schifone*

Richard M. Schifone, Supervisor
Rights & Permits

Dated this 8th day of December

Town of **NEEDHAM** Massachusetts

Received and filed _____ 2020

ORDER FOR LOCATION FOR CONDUITS AND MANHOLES
Town of NEEDHAM

WHEREAS, **NSTAR ELECTRIC COMPANY dba EVERSOURCE ENERGY** has petitioned for permission to construct a line for the transmission of electricity for lighting, heating or power under the public way or ways of the Town thereafter specified, and notice has been given and a hearing held on said petition as provided by law.

It is ORDERED that **NSTAR ELECTRIC COMPANY dba EVERSOURCE ENERGY** be and hereby is granted permission to construct and a location for, such a line of conduits and manholes with the necessary wires and cables therein under the following public way or ways of said Town:

**George Aggott Road Southeasterly from pole 151/3, near the
intersection of Sutton Road , a distance of 8± feet
- conduit**

W/O #2415034

All construction work under this Order shall be in accordance with the following conditions:

1. Conduits and manholes shall be located as shown on the plan made by **T. Thibault, dated December 03, 2020** on the file with said petition.
2. Said shall comply with the requirements of existing by-laws and such as may hereafter be adopted governing the construction and maintenance of conduits and manholes.
3. Company All work shall be done to the satisfaction of the Select Board or such officer or officers as it may appoint to supervise the work.

1	_____	
2	_____	
3	_____	
4	_____	
5	_____	

Select Board
the Town of
NEEDHAM

CERTIFICATE

We hereby certify that the foregoing Order was adopted after due notice and a public hearing as prescribed by Section 22 of Chapter 166 of the General Laws (Ter. Ed.), and any additions thereto or amendments thereof, to wit:-after written notice of the time and place of the hearing mailed at least seven days prior to the date of the hearing by the Selectmen to all owners of real estate abutting upon that part of the way or ways upon, along or across which the line is to be constructed under said Order, as determined by the last preceding assessment for taxation, and a public hearing held on the _____ day of _____ 2020 at _____ in said Town.

1	_____	
2	_____	
3	_____	
4	_____	
5	_____	

Select Board
the Town of
NEEDHAM

CERTIFICATE

I hereby certify that the foregoing are true copies of the Order of the **Select Board** of the Town of **NEEDHAM**, Massachusetts, duly adopted on the _____ day of _____, 2020 and recorded with the records of location Orders of said Town, Book _____, Page _____ and of the certificate of notice of hearing thereon required by Section 22 of Chapter 166 of the General Laws (Ter.Ed.) and any additions thereto or amendments thereof, as the same appear of record.

Attest: _____
Clerk of the Town of **NEEDHAM**, Massachusetts



STREET SURFACE

SECTION OF PROPOSED LINE

1-IRON PIPE OR
1-PVC CONDUIT (SCH.40)
OR 1-FIBRE DUCT

FIGURE - 1



SCALE IN FEET

BY YOUR USE OF THE INFORMATION CONTAINED IN THIS MAP, YOU AGREE THAT NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, IS GIVEN WITH RESPECT TO THE INFORMATION. NEITHER NSTAR ELECTRIC COMPANY, NSTAR GAS COMPANY NOR ITS PARENTS, AFFILIATES, OFFICERS, DIRECTORS, SHAREHOLDERS, EMPLOYEES OR AGENTS (COLLECTIVELY THE "NSTAR ENTITIES") SHALL BE LIABLE FOR ANY LOSS OR INJURY CAUSED IN WHOLE OR IN PART BY USE OF THIS INFORMATION, OR IN RELIANCE UPON IT, TO THE MAXIMUM EXTENT ALLOWED BY LAW. YOU AGREE BY YOUR ACCEPTANCE OF THE INFORMATION TO RELEASE, EXCEPT AND HOLD OF NSTAR ENTITIES, HARMLESS FROM ANY SUCH LOSS OR INJURY.

THE INFORMATION MAY NOT REPRESENT A SURVEY, MAY NOT BE THE MOST COMPLETE AND IS SUBJECT TO CHANGE WITHOUT NOTICE. NO LIABILITY IS ASSUMED FOR THE ACCURACY OF THE INFORMATION, EITHER EXPRESSED OR IMPLIED. UNAUTHORIZED ATTEMPTS TO MODIFY THE INFORMATION OR USE THE INFORMATION FOR OTHER THAN ITS INTENDED PURPOSES ARE PROHIBITED.

MASS. LAW

**REQUIRES 72 HOURS ADVANCE NOTICE TO UTILITY COMPANIES
BEFORE DIGGING BY ANYONE CALL DIG-SAFE 1-888-244-7233**

C# 265-20

Ward # -

Work Order # 2415034

Surveyed by: JC

Research b

Plotted by: JF

Proposed Structures: JI

Approved: T THIBAUT

#d

ASTAR
ELECTRIC
d/b/a

EVERSOURCE

1165 MASSACHUSETTS AVE. DORCHESTER, MASS. 02125

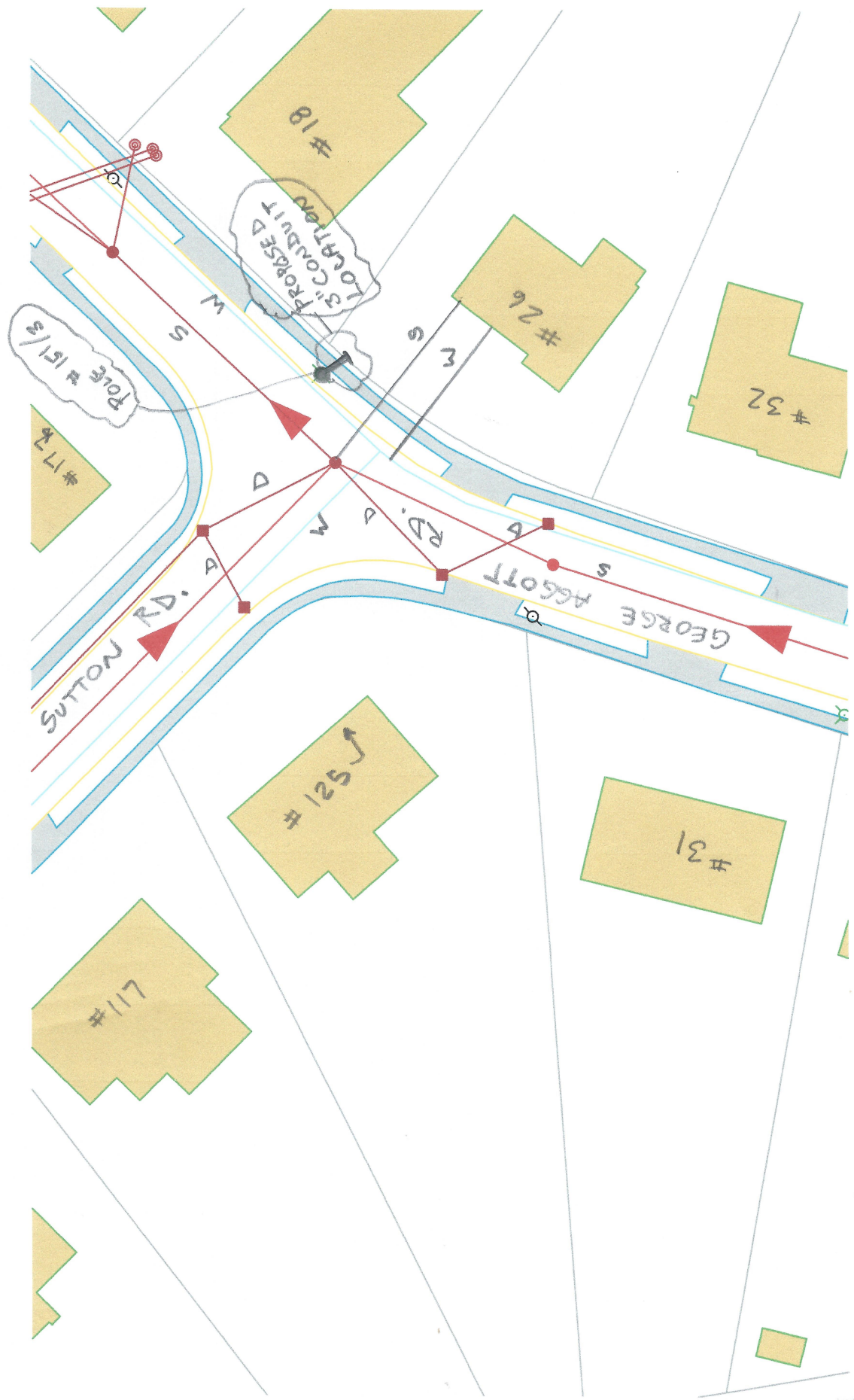
Plan of #26 GEORGE AGGOTT RD., NEEDHAM

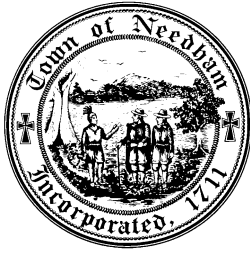
Showing PROPOSED CONDUIT LOCATION

Scale	1"=20'	Date	DECEMBER 3, 2020
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SHEET 1 of 1

1"=40'
2





Under Governor Baker's emergency "Order Suspending Certain Provisions of the Open Meeting Law G.L. c. 30A, S20," issued March 12, 2020 and in effect until termination of the emergency, meeting of public bodies may be conducted virtually provided that adequate access is provided to the public.

The Select Board will hold this public hearing as part of its virtual meeting on Tuesday, December 22, 2020 at 6:00 p.m. No in-person meeting will take place at the Needham Town Hall, 1471 Highland Avenue, Needham, MA.

To listen, view and participate in this virtual meeting on your phone, computer, laptop, or tablet, download the "Zoom Cloud Meeting" app in any app store or at www.zoom.us. Zoom meeting ID information will be posted on the Select Board's agenda at www.needhamma.gov on December 18, 2020, alternatively you may call 781-455-7500 ext. 204.

NOTICE

To the Record

You are hereby notified that a virtual public hearing will be held **at 6:00 p.m. on December 22, 2020** upon petition of Eversource Energy dated **December 8, 2020** to install approximately 8 feet of conduit in George Aggott Road. This work is necessary for electric service to 26 George Aggott Road, Needham.

A public hearing is required, and abutters should be notified.

If you have any questions regarding this petition, please contact Maureen Carroll, Eversource Energy Representative at (781) 314-5053.

Maurice P. Handel
Matthew D. Borrelli
Marianne B. Cooley
Daniel P. Matthews
John A. Bulian

SELECT BOARD

Dated: December 14, 2020

GOL - GEORGE AGGOTT ROAD

OWNER NAME 1	OWNER NAME 2	MAILING ADDRESS	CITY	ST	ZIP	PARCEL ID	PROPERTY ADDRESS
ZHOU, WENLIE		38 GEORGE AGGOTT RD	NEEDHAM	MA	02492	1990360002300000	38 GEORGE AGGOTT RD
OXMAN, JANET B +	SIMON, RICHARD E	39 GEORGE AGGOTT RD	NEEDHAM	MA	02492	1990360002400000	39 GEORGE AGGOTT RD
MEHTA, NARENDRA I +	MEHTA, SHRUTI N	76 GREENDALE AVE	NEEDHAM	MA	02494	1990360003600000	125 SUTTON RD
GROTSKY, DAVID &	NAJEMY, LAURA	31 GEORGE AGGOTT RD	NEEDHAM	MA	02492	1990360003700000	31 GEORGE AGGOTT RD
SEN, SARBATTAMA &	KELKAR, SAMIR A.	32 GEORGE AGGOTT RD	NEEDHAM	MA	02492	1990360003800000	32 GEORGE AGGOTT RD
BAKSTRAN, ERICK &	BAKSTRAN, TOVAH	26 GEORGE AGGOTT RD	NEEDHAM	MA	02492	1990360003900000	26 GEORGE AGGOTT RD
STEVENS, SCOTT W. &	STEVENS, JULIE E.	18 GEORGE AGGOTT RD	NEEDHAM	MA	02492	1990360004000000	18 GEORGE AGGOTT RD
MULVIHILL, ANN MARIE +	MULVIHILL, MARGARET M.	12 GEORGE AGGOTT RD	NEEDHAM	MA	02492	1990360004100000	12 GEORGE AGGOTT RD
OHANLEY, LOUISE		17 GEORGE AGGOTT RD	NEEDHAM	MA	02492	1990360004200000	17 GEORGE AGGOTT RD
SCALIA, JOSEPH P +	SCALIA, ELIZABETH B	99 CANTERBURY LN	NEEDHAM	MA	02492	1992020002600010	99 CANTERBURY LN
MACKENZIE, KEITH C. &	MACKENZIE, DENISE L.	96 CANTERBURY LN	NEEDHAM	MA	02492	1992020002700000	96 CANTERBURY LN

Certified as list of parties in interest under Mass. General Laws and Needham Zoning By-Law, to the Best of our knowledge
for the Needham Board of Assessors. 



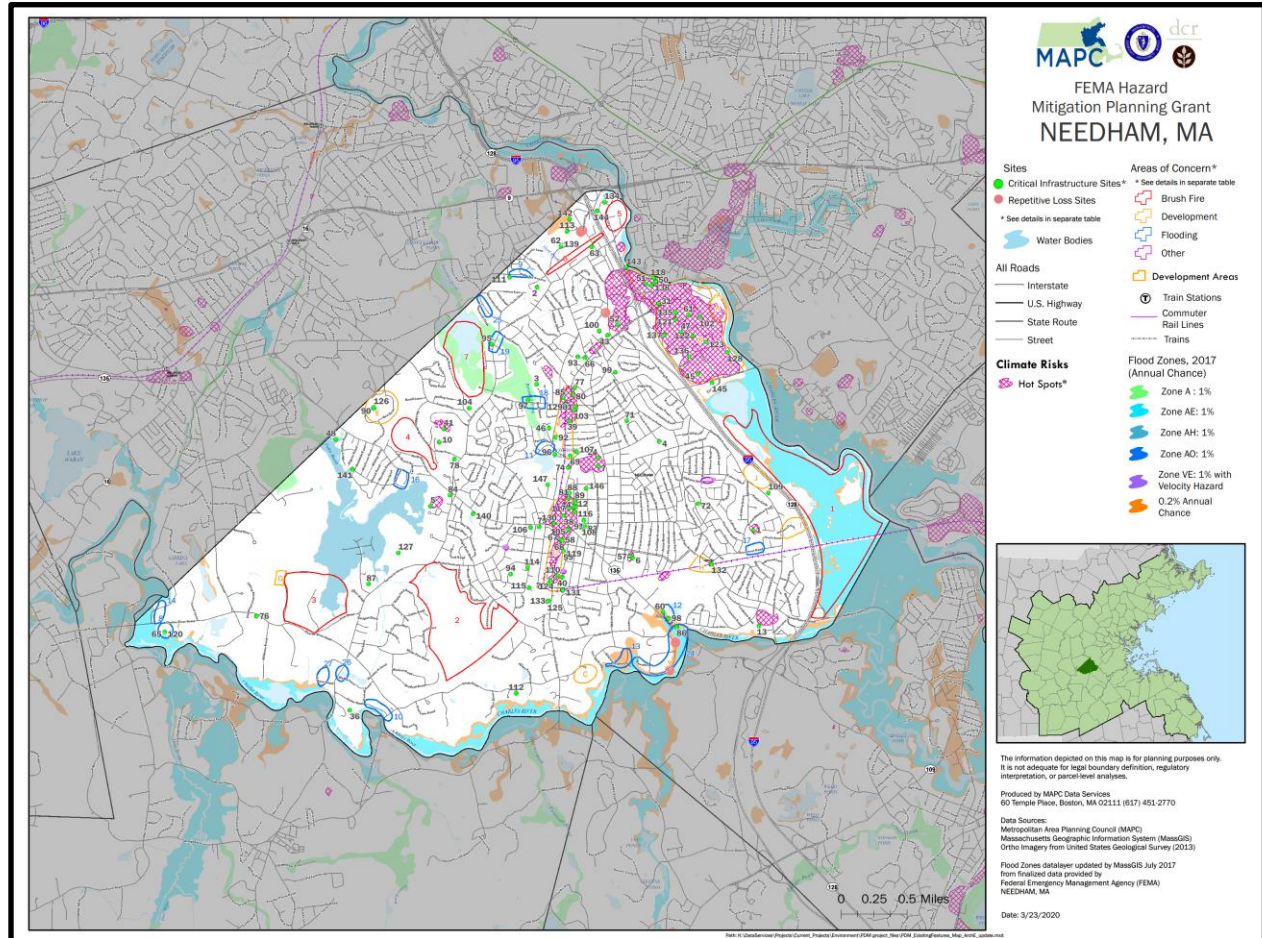
**Select Board
TOWN OF NEEDHAM
AGENDA FACT SHEET**

MEETING DATE: 12/22/2020

Agenda Item	Hazard Mitigation Plan
Presenter(s)	Kim Donovan, Compliance Coordinator, Dept. of Public Works Michael Lethin, Emergency Management Administrator

1.	BRIEF DESCRIPTION OF TOPIC TO BE DISCUSSED
Staff will present the Town's 2020 Hazard Mitigation Plan. This Plan was reviewed by the Select Board on June 9, 2020, approved by the Massachusetts Emergency Management Agency on August 10, 2020, and received Approval Pending Adoption from the Federal Emergency Management Agency (FEMA) on October 9, 2020. If the Plan is formally adopted by the Select Board, FEMA will formally approve the Plan for the next five years, making the Town eligible for FEMA mitigation grants.	
2.	VOTE REQUIRED BY SELECT BOARD
<i>Suggested Motion:</i> That the Board vote to adopt the Town of Needham's Hazard Mitigation Plan 2020 Update.	
3.	BACK UP INFORMATION ATTACHED
a. Town of Needham Hazard Mitigation Plan 2020 Update b. PowerPoint Presentation c. Resolution Adopting the Hazard Mitigation Plan	

TOWN OF NEEDHAM HAZARD MITIGATION PLAN 2020 UPDATE



Final Plan
FEMA Approval Pending Adoption
October 9, 2020

ACKNOWLEDGEMENTS & CREDITS

This plan was prepared for the Town of Needham by the Metropolitan Area Planning Council (MAPC) under the direction of the Massachusetts Emergency Management Agency (MEMA) and the Massachusetts Department of Conservation and Recreation (DCR). The plan was funded by the Massachusetts Municipal Vulnerability Preparedness Program.

MAPC Officers

President, Erin Wortman, Town of Stoneham
Vice President, Adam Chapdelaine, Town of Arlington
Secretary, Sandra Hackman, Town of Bedford
Treasurer, Sam Seidel, Gubernatorial
Executive Director, Marc Draisen, MAPC

Credits

Project Manager: Anne Herbst
Lead Project Planner: Anne Herbst
Mapping/GIS Services: Caitlin Spence

Massachusetts Emergency Management Agency

Director: Samantha Phillips

Department of Conservation and Recreation

Commissioner: Jim Montgomery

Needham Local Hazard Mitigation Planning Team

Rebecca Ping	Emergency Management Administrator, Project Coordinator
Kimberly Donovan	Compliance Coordinator
Sean Harrington	Superintendent Water and Sewer
Nicholas Ceurvels	Lieutenant Firefighter
Tony Del Gaizo	Town Engineer
Richard Merson	Public Works Director
Carys Lustig	Director of Finance and Administration for Public Services
Eleanor Rosellini	Green Needham Collaborative
Jessica Moss	Assistant Director of Counseling and Volunteers
Dave Roche	Building Commissioner
Steve Cusick	Water Treatment Plant Manager
Debbie Anderson	Conservation Administrator
Tiffany Zike	Public Health Nurse
John McGrath	Police Lieutenant
Barry Dulong	Director of Building Maintenance
Rhain Hayland	Superintendent Highway Division
Lee Newman	Director of Planning and Community Development

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SECTION 1: EXECUTIVE SUMMARY

Hazard Mitigation planning is a proactive effort to identify actions that can be taken to reduce the dangers to life and property from natural hazard events. In the communities of the Boston region of Massachusetts, hazard mitigation planning tends to focus most on flooding, the most likely natural hazard to impact these communities. The Federal Disaster Mitigation Act of 2000 requires all municipalities that wish to be eligible to receive FEMA funding for hazard mitigation grants, to adopt a local multi-hazard mitigation plan and update this plan in five year intervals.

PLANNING PROCESS

Planning for the Hazard Mitigation Plan update was led by the Needham Local Hazard Mitigation Planning Team, composed of staff from a number of different town departments. The team also led a parallel planning process as part of the Massachusetts Municipal Vulnerability Preparedness (MVP) program focused on identifying climate risks and resilience strategies. In the joint effort, the team met on November 13, 2019, December 11, 2019, and May 21, 2020 and discussed where the impacts of natural hazards most affect the town, goals for addressing these impacts, updates to the Town's existing mitigation measures, and new or revised hazard mitigation measures that would benefit the town.

Public participation in this planning process is important for improving awareness of the potential impacts of natural hazards and to build support for the actions the Town takes to mitigate them. The Town's Local Hazard Mitigation Planning Team hosted two public meetings. Due to the restrictions on public gatherings associated with the corona virus pandemic public outreach had to be handled creatively. The first meeting took place in the form of a website posted on May 4, 2020 that provided a video presentation and survey for participants to fill out. The video was viewed more than 70 times and 20 people filled out surveys. The second meeting on June 9, 2020 was held via Zoom and the draft plan update was posted on the Town's website for public review. Key town stakeholders and neighboring communities were notified and invited to review the draft plan and submit comments. As part of the MVP program, the town hosted an all-day workshop on January 10, 2020 where 39 participants identified climate resilience vulnerabilities and mitigation strategies. These strategies were also reviewed in the May website posting. See Public Comments for feedback. The top priorities are shown in Appendix E.

RISK ASSESSMENT

The Needham Hazard Mitigation Plan assesses the potential impacts to the town from flooding, high winds, winter storms, brush fire, geologic hazards, extreme temperatures, drought and, invasive species. For each risk, the assessment identifies the projected impacts of a warming climate. These are shown in the map series in Appendix B. The Needham Local Hazard Mitigation Planning Team identified 113 Critical Facilities. These are also shown on the map series and listed in Table 28, identifying which facilities are located within the mapped hazard zones.

Hazards U.S. – Multihazards (HAZUS-MH) is a standardized methodology developed by FEMA that utilizes Geographic Information Systems (GIS) to estimate physical, economic, and social impacts of disasters. The HAZUS-MH analysis for Needham estimates property damages from Hurricanes of category 2 and 4 (\$36 million to \$138 million), earthquakes of magnitudes 5 and 7 (\$725 million to \$6.3 billion), and the 1% and .2% chance of flooding (\$27 to \$36 million).

HAZARD MITIGATION GOALS

The Needham Local Multiple Hazard Community Planning Team endorsed the following eleven hazard mitigation goals at the January 16, 2020 team meeting. The team added an eleventh goal focused on incorporating future climate change projections.

1. Prevent and reduce the loss of life, injury, public health impacts and property damages resulting from all major natural hazards.
2. Identify and seek funding for measures to mitigate or eliminate each known significant flood hazard area.
3. Integrate hazard mitigation planning as an integral factor in all relevant municipal departments, committees and boards.
4. Prevent and reduce the damage to public infrastructure resulting from all hazards.
5. Encourage the business community, major institutions and non-profits to work with the Town to develop, review and implement the hazard mitigation plan.
6. Work with surrounding communities, state, regional and federal agencies to ensure regional cooperation and solutions for hazards affecting multiple communities.
7. Ensure that future development meets federal, state and local standards for preventing and reducing the impacts of natural hazards.
8. Take maximum advantage of resources from FEMA and MEMA to educate Town staff and the public about hazard mitigation.
9. Consider the potential impacts of future climate change. Incorporate climate sustainability and resiliency in hazard mitigation planning.

HAZARD MITIGATION STRATEGY

The Needham Local Hazard Mitigation Planning Team identified a number of mitigation measures that would serve to reduce the Town's vulnerability to natural hazard events. Overall, the hazard mitigation strategy recognizes that mitigating hazards for Needham will be an ongoing process as our understanding of natural hazards and the steps that can be taken to mitigate their damages changes over time. Global climate change and a variety of other factors impact the Town's vulnerability in the future, and local officials will need to work together across municipal

lines and with state and federal agencies in order to understand and address these changes. The Hazard Mitigation Strategy will be incorporated into the Town's other related plans and policies.

PLAN REVIEW & UPDATE PROCESS

The process for developing Needham's Hazard Mitigation Plan 2020 Update is summarized in Table 1.

Table 1: Plan Review and Update Process

Section	Reviews and Updates
Section 3: Public Participation	The Local Hazard Mitigation Planning Team placed an emphasis on public participation for the update of the Hazard Mitigation Plan, discussing strategies to enhance participation opportunities at the first local committee meeting. During plan development, the plan was discussed at two public meetings hosted by the Hazard Mitigation Team and the Select Board. The plan was also available on the Town's website for public comment. See Public Comments for feedback.
Section 4: Risk Assessment	MAPC gathered the most recently available hazard and land use data and met with town staff to identify changes in local hazard areas and development trends. Town staff reviewed critical infrastructure with MAPC staff in order to create an up-to-date list. The Risk Assessment integrates projected climate impacts. MAPC also used the most recently available version of HAZUS and assessed the potential impacts of flooding using the latest data.
Section 5: Goals	The Hazard Mitigation Goals were reviewed and endorsed by the Needham Local Hazard Mitigation Planning Team.
Section 6: Existing Mitigation Measures	The list of existing mitigation measures was updated to reflect current mitigation activities in the town.
Sections 7 and 8: Hazard Mitigation Strategy	Mitigation measures from the 2009 plan were reviewed and assessed as to whether they were completed, in progress, or deferred. The Local Hazard Mitigation Planning Team determined whether to carry forward measures into the 2020 Plan Update or modify or delete them. The Plan Update's hazard mitigation strategy reflects both new measures and measures carried forward from the 2009 plan. The Local Hazard Mitigation Team prioritized all of these measures based on current conditions.
Section 9: Plan Adoption & Maintenance	This section of the plan was updated with a new on-going plan implementation review and five year update process that will assist the Town in incorporating hazard mitigation issues into other Town planning and regulatory review processes and better prepare the Town for the next comprehensive plan update.

As indicated in Table 33, Needham made good progress implementing mitigation measures identified in the 2009 Hazard Mitigation Plan. Considerable work has been done reduce infiltration into the sewer system. The Town is now moving its focus to inflow. Bypass protocols are in place to prevent sewer back-ups. The Town purchased portable generators for multiple locations. The control structure and weir at Walker Pond were completed. The Hazardous Materials Response plan was revised and updated. The Town continues to make open space purchases and regularly sets aside \$1.5 million for purchase of priority properties that may become available. The Town adopted a strong stormwater bylaw and completed a comprehensive stormwater management plan in compliance with MS4 requirements.

Some projects were partially completed, and/or will be continued to the next plan for on-going maintenance. A permanent generator is needed for the Senior Center and for sewer pump stations as they are upgraded. While many bridges have been updated, the Central Avenue bridge to Dover needs attention. Stormwater management and open space purchases are all ongoing priorities.

Moving forward into the next five-year plan implementation period there will be many more opportunities to incorporate hazard mitigation into the Town's decision-making processes. As in the past, the Town will document any actions taken within this iteration of the Hazard Mitigation Plan on challenges met and actions successfully adopted as part of the ongoing plan maintenance to be conducted by the Needham Hazard Mitigation Implementation Team, as described in Section 9 Plan Adoption and Maintenance.

SECTION 2: INTRODUCTION

PLANNING REQUIREMENTS UNDER THE FEDERAL DISASTER MITIGATION ACT

The Federal Disaster Mitigation Act, passed in 2000, requires that after November 1, 2004, all municipalities that wish to continue to be eligible to receive FEMA funding for hazard mitigation grants, must adopt a local multi-hazard mitigation plan and update this plan in five year intervals. This planning requirement does not affect disaster assistance funding.

Federal hazard mitigation planning and grant programs are administered by the Federal Emergency Management Agency (FEMA) in collaboration with the states. These programs are administered in Massachusetts by the Massachusetts Emergency Management Agency (MEMA) in partnership with the Department of Conservation and Recreation (DCR).

The Town of Needham contracted with the Metropolitan Area Planning Council (MAPC), to assist the Town in updating its local Hazard Mitigation Plan to assist the Town in updating its local Hazard Mitigation Plan, which was first adopted in 2009 as a multijurisdictional plan.

WHAT IS A HAZARD MITIGATION PLAN?

Natural hazard mitigation planning is the process of determining how to systematically reduce or eliminate the loss of life and property damage resulting from natural hazards such as floods, earthquakes, and hurricanes. Hazard mitigation means to permanently reduce or alleviate the losses of life, injuries, and property resulting from natural hazards through long-term strategies. These long-term strategies include planning, policy changes, programs, projects, and other activities. This plan incorporates consideration of future risks due to projections for the increased frequency and severity of extreme weather fueled by a warming planet.

PREVIOUS FEDERAL/STATE DISASTERS

Since 1991, there have been 24 natural hazard events that triggered federal or state disaster declarations that included Norfolk County. These are listed in Table 2 below. The majority of these events involved flooding, while others were due to hurricanes or nor'easters, and severe winter weather.

Table 2: Presidentially Declared Disasters, 1991-2018

Disaster Name	Date of Event	Declared Areas
Hurricane Bob	August 1991	Counties of Barnstable, Bristol, Dukes, Essex, Hampden, Middlesex, Plymouth, Nantucket, Norfolk, Suffolk
Severe Coastal Storm No Name Storm	October 1991	Counties of Barnstable, Bristol, Dukes, Essex, Middlesex, Plymouth, Nantucket, Norfolk, Suffolk

Disaster Name	Date of Event	Declared Areas
Blizzard	March 1993	Statewide
Blizzard	January 1996	Statewide
Severe Storms, Flood	October 1996	Counties of Essex, Middlesex, Norfolk, Plymouth, Suffolk
Heavy Rain, Flood	June 1998	Counties of Bristol, Essex, Middlesex, Norfolk, Suffolk, Plymouth, Worcester
Severe Storms, Flood	March 2001	Counties of Bristol, Essex, Middlesex, Norfolk, Suffolk, Plymouth, Worcester
Snowstorm	March 2001	Berkshire, Essex, Franklin, Hampshire, Middlesex, Norfolk, Worcester
Snowstorm	February 2003	Statewide
Snowstorm	December 2003	Barnstable, Berkshire, Bristol, Essex, Franklin, Hampden, Hampshire, Middlesex, Norfolk, Plymouth, Suffolk, Worcester
Flooding	April 2004	Essex, Middlesex, Norfolk, Suffolk, Worcester
Snow	January 2005	Statewide
Hurricane Katrina	August 2005	Statewide
Severe Storms, Flooding	October 2005	Statewide
Severe Storms, Flooding	May 2006	Statewide
Severe Storm, Inland, Coastal Flooding	April 2007	Statewide
Severe Storms, Flooding	December 2008	Statewide
Severe Storms, Flooding	March/April 2010	Bristol, Essex, Middlesex, Suffolk, Norfolk, Plymouth, Worcester
Severe Winter Storm, Snowstorm	January 2011	Berkshire, Essex, Hampden, Hampshire, Middlesex, Norfolk, Suffolk
Tropical Storm Irene	August 2011	Barnstable, Berkshire, Bristol, Dukes, Franklin, Hampden, Hampshire, Norfolk, Plymouth
Severe Winter Storm, Snowstorm and Flooding	February, 2013	Statewide
Severe winter storm, snowstorm and flooding	April 2015	Barnstable, Bristol, Dukes, Essex, Middlesex, Nantucket, Norfolk, Plymouth, Suffolk, Worcester
Severe winter storm and flooding	March 2018	Barnstable, Bristol, Essex, Nantucket, Norfolk, Plymouth

Disaster Name	Date of Event	Declared Areas
Severe winter storm and Snowstorm	March 2018	Essex, Middlesex, Norfolk, Suffolk, Worcester

Source: MA Hazard Mitigation and Climate Adaptation Plan, 2018

FEMA FUNDED MITIGATION PROJECTS

Needham has not previously received FEMA funded mitigation projects.

COMMUNITY PROFILE

Needham covers nearly 13 square miles and is located 10 miles southwest of downtown Boston. The Charles River surrounds Needham on three sides. The Town of Needham was established in 1711. Through the mid-1800's Needham was primarily an agricultural community. With the development of rail access, Needham became home to seasonal estates and to the knitting industry. The construction of Route 128 in the mid-20th century brought new commercial ventures. Needham today is residential suburban community with significant business presence along Route 128.

Needham is a relatively affluent community with high median annual income and a low poverty rate. Needham has just over 30,000 residents. Roughly 87% of residents are White. There is a growing Asian population. Approximately half of the 8% of the population that identifies as Asian is of Chinese descent. Notably, 25% of Needham's population lives alone, and 50% of those living alone are over 65 years old.

The town maintains a website at <http://www.needhamma.gov/>

Table 3: Needham Characteristics

Population = 30,429 people
• 5.2% are under age 5 • 26.8% are under age 18 • 18.1% are over age 65 • 5.5% of households have no vehicle available • 85% of the population is White
Number of Housing Units = 11,222
• 16.8% are renter-occupied housing units • 23.1% of housing units were built before 1940

Source: 2018 American Community Survey

The Town of Needham has several unique characteristics to keep in mind while planning for natural hazards:

- Needham has been proactive in addressing the impact of climate on natural hazards; the community is in the process of becoming certified by the state as a Municipal Vulnerability Preparedness community.
- Needham lies within the Charles River watershed and is encircled by the river on three sides.
- Water quantity and quality are important concerns for maintaining drinking water supply and the health of the many brooks, river and wetlands within the town.
- Records from flooding in 2010 highlight that the more densely developed northeast half of the town is where flood damage occurred.
- A portion of Route 128 lies within Needham's boundaries. Residents noted concerns about potential impacts from the transport of hazardous materials, and for extreme traffic tie-ups in the event of emergency evacuations.

SECTION 3: PLANNING PROCESS & PUBLIC PARTICIPATION

MAPC employs a six-step planning process based on FEMA's hazard mitigation planning guidance focusing on local needs and priorities but maintaining a regional perspective matched to the scale and nature of natural hazard events. Public participation is a central component of this process, providing critical information about the local occurrence of hazards while also serving as a means to build a base of support for hazard mitigation activities. MAPC supports participation by the general public and other plan stakeholders through two public meetings, posting of the plan to the Town's website, and invitations sent to neighboring communities, town boards and commissions, and other local or regional entities to review the plan and provide comment.

PLANNING PROCESS SUMMARY

The six-step planning process outlined below is based on the guidance provided by FEMA's Local Multi-Hazard Mitigation Planning Guidance. Public participation is a central element of this process, which attempts to focus on local problem areas and identify needed mitigation measures based on where gaps occur in the existing mitigation efforts of the municipality. In plan updates, the process described below allows staff to bring the most recent hazard information into the plan, including new hazard occurrence data, changes to a municipality's existing mitigation measures, and progress made on actions identified in previous plans.

Figure 1: Six-Step Planning Process



1. **Map the Hazards** – MAPC relies on data from a number of different federal, state, and local sources in order to map the areas with the potential to experience natural hazards. This mapping represents a multi-hazard assessment of the municipality and is used as a set of base maps for the remainder of the planning process. A particularly important source of information is the knowledge drawn from local municipal staff on where natural hazard impacts have occurred. These maps can be found in Appendix B.

2. **Assess the Risks & Potential Damages** – Working with local staff, critical facilities, infrastructure, vulnerable populations, and other features are mapped and contrasted with the hazard data from the first step to identify those that might represent particular vulnerabilities to these hazards. Land use data and development trends are also incorporated into this analysis. In addition, MAPC develops estimates of the potential impacts of certain hazard events on the community. MAPC drew on the following resources to complete the plan:

- Town of Needham General By-Laws
- Zoning By-Law of the Town of Needham
- Town of Needham Community Resilience Building Workshop Summary of Findings 2020
- Town of Needham Draft Open Space and Recreation Plan 2017
- Blue Hill Observatory
- FEMA, Flood Insurance Rate Maps for Norfolk County, MA, 2012
- FEMA, Hazards U.S. Multi-Hazard
- FEMA, Local Mitigation Plan Review Guide, October 2011
- Fourth National Climate Assessment, 2018
- Massachusetts Flood Hazard Management Program
- Massachusetts Office of Coastal Zone Management Shoreline Change Data
- Massachusetts Office of Dam Safety, Inventory of Massachusetts Dams 2018
- Massachusetts State Hazard Mitigation Plan, 2013
- Massachusetts State Hazard Mitigation and Climate Adaptation Plan, 2018
- Metropolitan Area Planning Council, GIS Lab, Regional Plans and Data
- National Weather Service
- Nevada Seismological Library
- New England Seismic Network, Boston College Weston Observatory, <http://aki.bc.edu/index.htm>
- NOAA National Climatic Data Center, <http://www.ncdc.noaa.gov/>
- Northeast Climate Adaptation Science Center
- Northeast States Emergency Consortium, <http://www.nesec.org/>
- Tornado History Project
- US Census, 2010 and American Community Survey 2017 5-Year Estimates
- USGS, National Water Information System, <http://nwis.waterdata.usgs.gov/usa/nwis>

3. **Review Existing Mitigation** – Municipalities in the Boston Metropolitan Region have an active history in hazard mitigation as most have adopted flood plain zoning districts, wetlands protection programs, and other measures as well as enforcing the State building code, which has strong provisions related to hazard resistant building requirements. All current municipal mitigation measures must be documented.

4. **Develop Mitigation Strategies** – MAPC works with the local municipal staff to identify new mitigation measures, utilizing information gathered from the hazard identification, vulnerability assessments, and the community's existing mitigation efforts to determine

where additional work is necessary to reduce the potential damages from hazard events. Additional information on the development of hazard mitigation strategies can be found in Section 7.

5. **Plan Approval & Adoption** – Once a final draft of the plan is complete it is sent to MEMA for the state level review and, following that, to FEMA for approval. Typically, once FEMA has approved the plan the agency issues a conditional approval (Approval Pending Adoption), with the condition being adoption of the plan by the municipality. More information on plan adoption can be found in Section 9 and documentation of plan adoption can be found in Appendix D.
6. **Implement & Update the Plan** – Implementation is the final and most important part of any planning process. Hazard Mitigation Plans must also be updated on a five year basis making preparation for the next plan update an important on-going activity. Section 9 includes more detailed information on plan implementation.

2009 PLAN IMPLEMENTATION & MAINTENANCE

The 2009 Town of Needham Hazard Mitigation Plan contained a risk assessment of identified hazards for the town and mitigation measures to address the risk and vulnerability from these hazards. Since approval of the plan by FEMA progress has been made on implementation of the measures. The Town has advanced a number of projects for implementation, addressing sewer infiltration, adoption of a Stormwater Bylaw and, land preservation.

THE LOCAL MULTIPLE HAZARD COMMUNITY PLANNING TEAM

MAPC worked with the local community representatives to organize a Local Hazard Mitigation Planning Team for Needham. MAPC briefed the local representatives as to the desired composition of that team as well as the need for public participation in the local planning process.

The Local Hazard Mitigation Planning Team is central to the planning process as it is the primary body tasked with developing a mitigation strategy for the community. The local team was tasked with working with MAPC to set plan goals, provide information on the hazards that impact the town, existing mitigation measures, and helping to develop new mitigation measures for this plan update. The Local Hazard Mitigation Planning Team membership is listed below.

Rebecca Ping	Emergency Management Administrator, Project Coordinator
Kimberly Donovan	Compliance Coordinator
Sean Harrington	Superintendent Water and Sewer
Nicholas Ceurvels	Lieutenant Firefighter
Tony Del Gaizo	Town Engineer
Richard Merson	Public Works Director
Carys Lustig	Director of Finance and Administration for Public Services
Eleanor Rosellini	Green Needham Collaborative
Jessica Moss	Assistant Director of Counselling and Volunteers – Council on Aging

Dave Roche	Building Commissioner
Steve Cusick	Water Treatment Plant Manager
Debbie Anderson	Conservation Administrator
Tiffany Zike	Public Health Nurse
John McGrath	Police Lieutenant
Barry Dulong	Director of Building Maintenance
Rhain Hayland	Superintendent Highway Division
Lee Newman	Director of Planning and Community Development

The Needham Planning Board and Conservation Commission are the primary entities responsible for regulating development in town. Feedback was assured through the participation of the Conservation Administrator and Director of Planning and Community Development. A member of the Planning Board and the Select Board and representatives of most town departments and many boards and commissions participated in an all-day workshop on natural hazards and climate impacts. In addition, MAPC, the State-designated regional planning authority for Needham, works with all agencies that regulate development in the region, including the listed municipal entities and state agencies, such as the Department of Transportation and the Department of Conservation and Recreation.

The Local Hazard Mitigation Planning Team met on the following dates: November 13, 2019, December 11, and May 21, 2020. The purpose of the meetings was to introduce the Hazard Mitigation planning program, review and update hazard mitigation goals, and to gather information on local hazard mitigation issues and sites or areas related to these. The team also coordinated the Municipal Vulnerability Preparedness Workshop in early November. Later meetings focused on verifying information gathered by MAPC staff and discussion of existing mitigation practices, the status of mitigation measures identified in the 2009 hazard mitigation plan, and potential new or revised mitigation measures. The agendas for these meetings are included in Appendix A.

PUBLIC MEETINGS

Public participation in the hazard mitigation planning process is important, both for plan development and for later implementation of the plan. Residents, business owners, and other community members are an excellent source for information on the historic and potential impacts of natural hazard events and particular vulnerabilities the community may face from these hazards. Their participation in this planning process also builds understanding of the concept of hazard mitigation and climate impacts, potentially creating support for mitigation actions taken in the future to implement the plan. To gather this information and educate residents on hazard mitigation, the Town hosted two public meetings, one during the planning process and one after a complete draft plan was available for review.

In addition to the two public meetings, Needham held an all-day workshop attended by thirty-nine Needham town staff, board and committee members, and representatives of local

organizations. The workshop focused on climate impacts to natural hazards. The public had an opportunity to provide input to the Needham hazard mitigation planning process during via a website that provided a video and survey feedback option during the first two weeks in May. The draft plan update was presented at a Select Board meeting on June 9, 2020 held virtually via Zoom. The Select Board meeting was also broadcast on local cable television and the Town website. Both meetings were publicized in accordance with the Massachusetts Public Meeting Law. The attendance list for each meeting can be found in Table 4. See public meeting notices in Appendix C.

Table 4: Needham Public Meetings

Meeting #1 May 4 to May 18 (virtual)
Total Attendance: 20+
20 filled out surveys
71 viewed the video
Meeting #2 June 9, 2020
Total Attendance: Virtual meeting
Name
5 members of the Select Board
Kim Donovan, Project Manager
Kate Fitzpatrick, Town Manager

LOCAL STAKEHOLDER INVOLVEMENT

The local Hazard Mitigation Planning Team was encouraged to reach out to local stakeholders that might have an interest in the Hazard Mitigation Plan including neighboring communities, agencies, businesses, nonprofits, and other interested parties. Notice was sent to the following organizations and neighboring municipalities inviting them to review the Hazard Mitigation Plan and submit comments to the Town:

- Charles River Watershed Association
- Newton Needham Chamber of Commerce
- Green Needham
- League of Women Voters
- Babson College
- Needham Heights Neighborhood Assoc.
- Beth Israel Deaconess – Needham
- MWRA
- Olin College
- Town of Wellesley
- Town of Dover
- Town of Westwood
- Town of Dedham
- City of Boston
- City of Newton
- Needham Clergy Association

See Appendix C for public meeting notices. The draft Needham Hazard Mitigation Plan 2020 Update was posted on the Town's website for the second public meeting. Members of the public could access the draft document and submit comments or questions to the Town.

PUBLIC COMMENT

Comments from the first public comment period indicated strong support for four priorities including protecting drinking water infrastructure, addressing stormwater flooding, strategies to both protect trees and protect the public from tree damage, and assuring robust and redundant utility and communications infrastructure. In addition, responses included strong support for reducing greenhouse gas emissions. Other suggestions included zoning strategies to limit the negative impacts of development, and outreach to populations at risk. Comments from the second meeting included support for a focus on stormwater flooding and for a tree replacement mitigation program.

CONTINUING PUBLIC PARTICIPATION

Following the adoption of the plan update, the planning team will continue to provide residents, businesses, and other stakeholders the opportunity to learn about the hazard mitigation planning process and to contribute information that will update the town's understanding of local hazards. As updates and a review of the plan are conducted by the Hazard Mitigation Implementation Team, these will be placed on the Town's web site, and any meetings of the Hazard Mitigation Implementation Team will be publicly noticed in accordance with town and state open meeting laws.

PLANNING TIMELINE

November 13, 2019	Meeting of the Needham Local Hazard Mitigation and MVP Planning Team
December 11, 2019	Meeting of the Needham Local Hazard Mitigation and MVP Planning Team
January 10, 2020	All day MVP Workshop
May 4-18, 2020	First Public Meeting held virtually
May 21 2020	Meeting of the Needham Local Hazard Mitigation and MVP Planning Team
June 9, 2020	Second Public Meeting with the Needham Select Board
June 25, 2020	Draft Plan Update submitted to MEMA
August 10, 2020	Draft Plan Update submitted to FEMA

October 9, 2020	Notice of Approvable Pending Adoption sent by FEMA
	Plan Adopted by the Needham Select Board
	FEMA final approval of the plan for 5 years, until x date

SECTION 4: RISK ASSESSMENT

The risk assessment analyzes the potential natural hazards that could occur within the Town of Needham as well as the relationship between those hazards and current land uses, potential future development, and critical infrastructure. This section also includes a vulnerability assessment that estimates the potential damages that could result from certain large-scale natural hazard events. In order to update Needham's risk assessment, MAPC gathered the most recently available hazard and land use data and met with Town staff to identify changes in local hazard areas and development trends. MAPC also used FEMA's damage estimation software, HAZUS.

With the adoption of the Hazard Mitigation and Climate Adaptation Plan 2018 (SHMCAP), Massachusetts became the first state to integrate climate projections in a state hazard mitigation plan. Following the state model, the projected impacts of our warming climate on natural hazards are integrated throughout the risk assessment. Key impacts include rising temperatures, which in turn affect precipitation patterns, sea level, and extreme weather.

"Global climate is changing rapidly compared to the pace of natural variations in climate that have occurred throughout Earth's history. Global average temperature has increased by about 1.8°F from 1901 to 2016, and observational evidence does not support any credible natural explanations for this amount of warming; instead, the evidence consistently points to human activities, especially emissions of greenhouse or heat-trapping gases, as the dominant cause."

Fourth National Climate Assessment, 2018 (Chapter 2-1)

CLIMATE CHANGE OBSERVATIONS AND PROJECTIONS

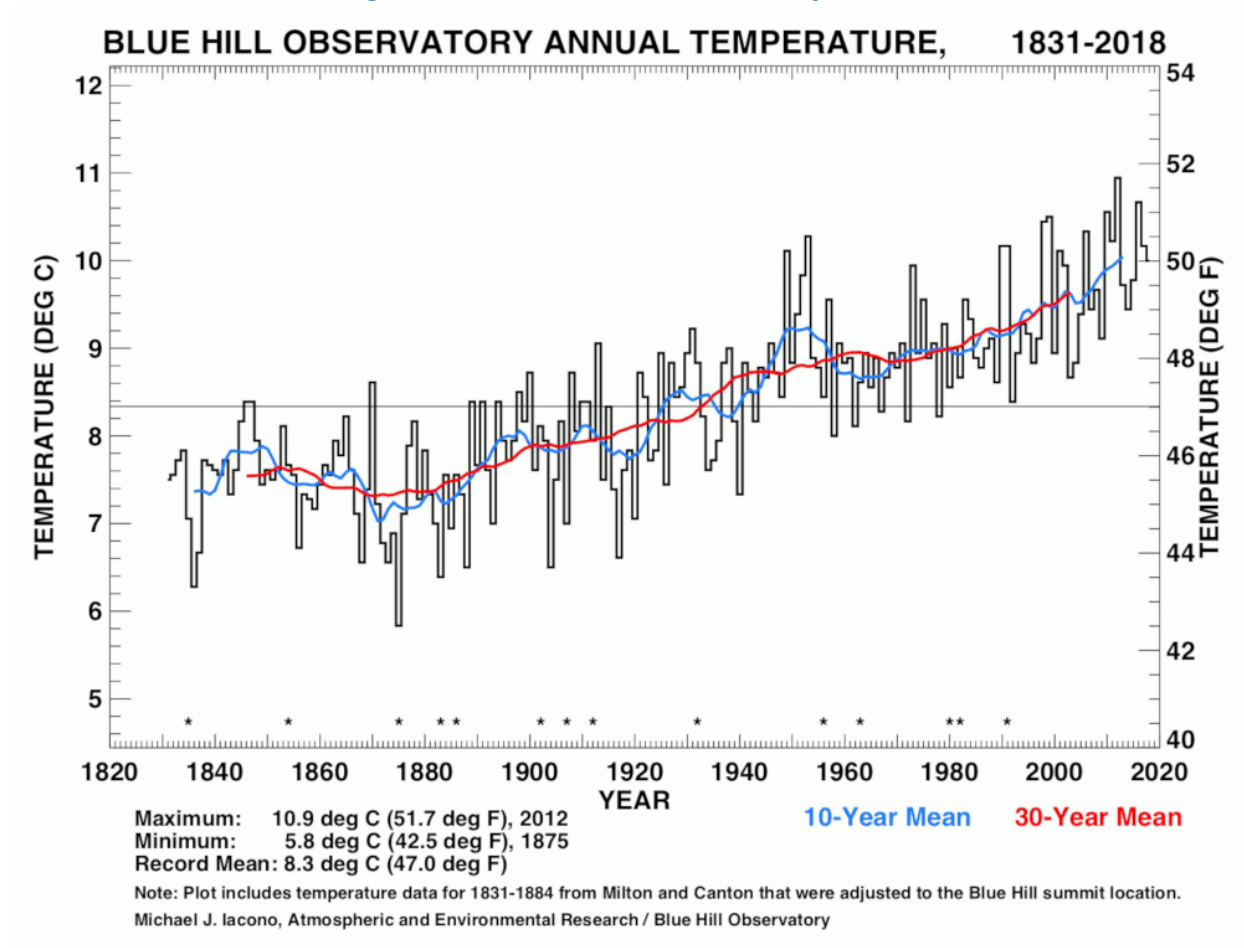
Climate change observations come from a variety of data sources that have measured and recorded changes in recent decades and centuries. Climate change projections, however, predict future climate impacts and, by their nature, cannot be observed or measured. As a result of the inherent uncertainty in predicting future conditions, climate projections are generally expressed as a range of possible impacts.

Temperature

Our climate has always been regulated by gases, including carbon dioxide, methane, and nitrous oxide, that blanket the earth. These gases trap heat that would otherwise be reflected out to space; without them our planet would be too cold to support life. We refer to these gases as "greenhouse gases" (GHGs) for their heat trapping capacity. The combustion of fossil fuels, our primary energy source in the age of industrialization, releases GHGs into the atmosphere. In the past century, human activity associated with industrialization has contributed to a growing concentration of GHGs in our atmosphere.

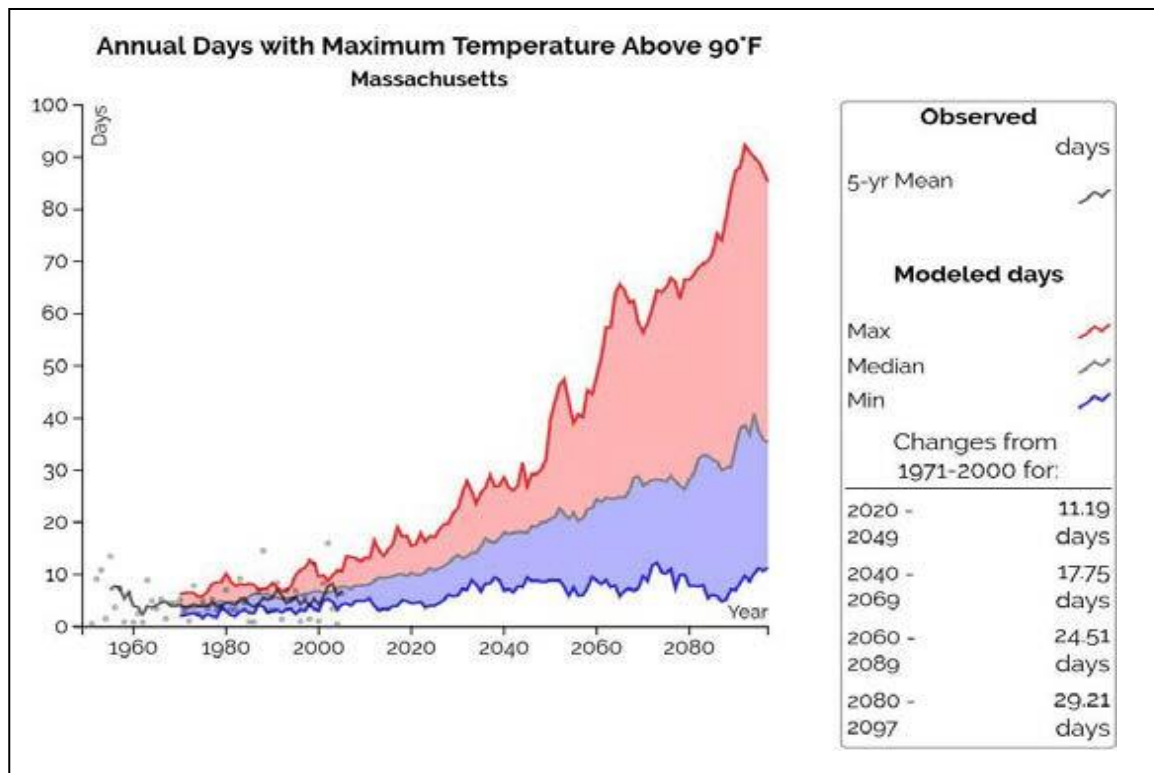
Records from the Blue Hill Observatory in Milton, MA show that average temperatures (30-year mean) have risen approximately 3 degrees (F) in the almost 200 years since record keeping began in 1831.

Figure 2: Observed Increase in Temperature



Climate projections include an increase in average temperature and in the number of extreme heat days. Extreme cold day are projected to decrease in number. The Northeast Climate Adaptation Science Center (NECASC) projects average temperatures in Massachusetts will increase by 5 degrees F by mid-century and nearly 7 degrees F by the end of the century. Table 3 shows the NECASC range of projections for increases in the number of days over 90 degrees annually.

Figure 3: Projected Increase in Annual Days Over 90 Degrees F



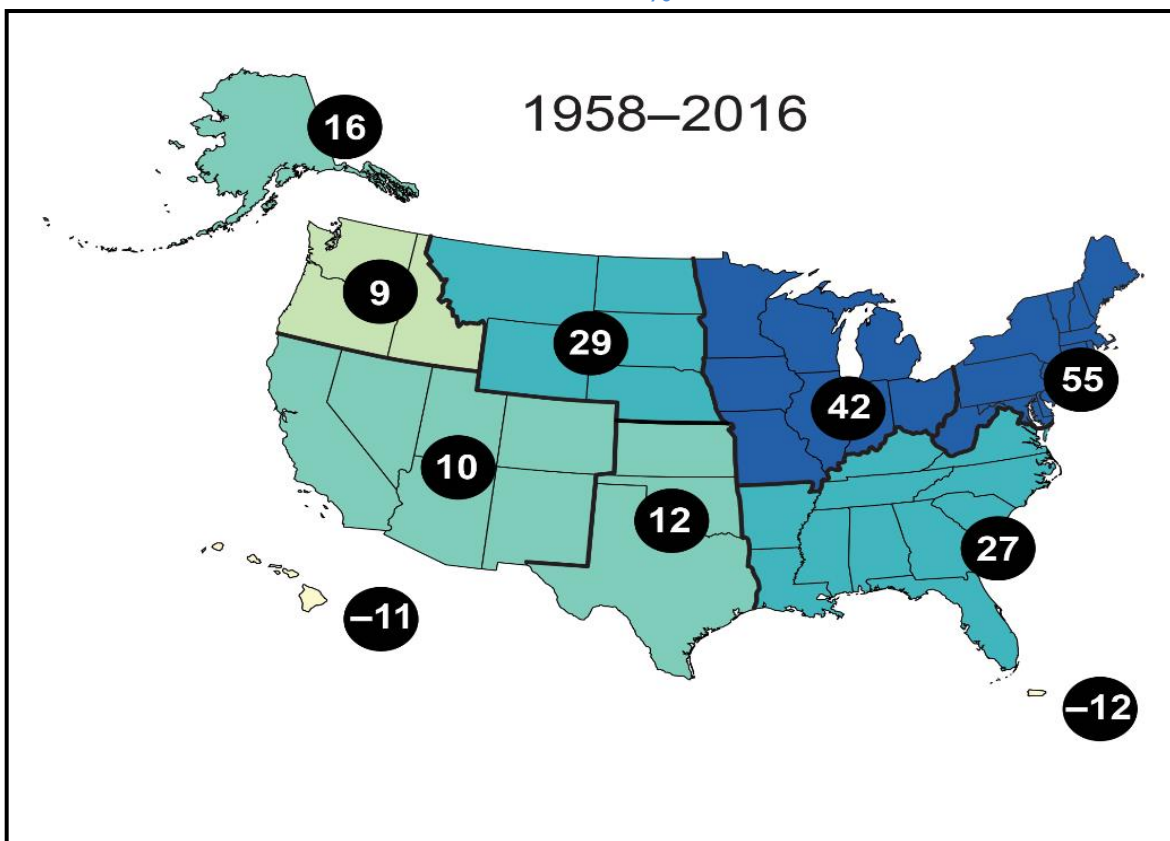
Source: Northeast Climate Adaptation Science Center

Precipitation Patterns

Annual precipitation in Massachusetts has increased by approximately 10% in the fifty-year period from 1960 to 2010 (MA Climate Adaptation Report, 2011). Moreover, there has been a significant increase in the frequency and intensity of large rain events. For the Northeast US, according to the Fourth National Climate Assessment 2018, in the past sixty years there has been a 55% increase in the amount of annual precipitation that falls in the top 1% of storm events (Figure 4). Changes in precipitation are fueled by warming temperatures which increase evaporation and, therefore, the amount of water vapor in the air.

Total annual precipitation in Massachusetts is projected to increase by 1 to 6 inches by mid-century, and by 1.2 to 7.3 inches by the end of this century (SHMCAP p. 2-22). The Fourth National Climate Assessment predicts that the pattern of increasing frequency and intensity of extreme rain events will continue. By 2070 to 2099, (relative to 1986 to 2015) they project a 30-40% increase in total annual precipitation falling in the heaviest 1% of rain events (Figure 5).

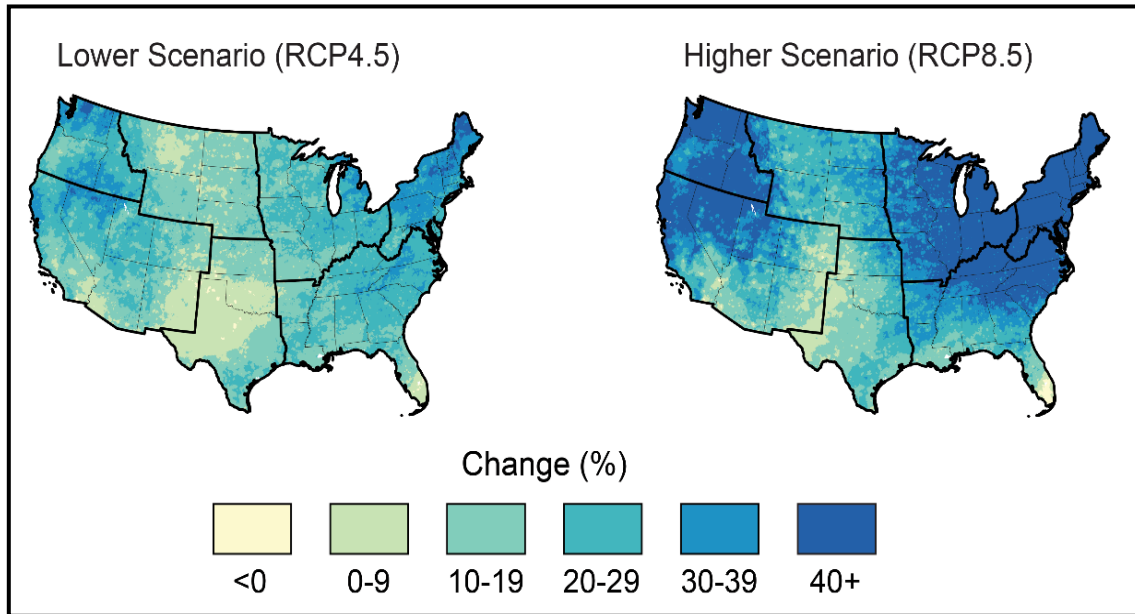
**Figure 4: Observed Change in Total Annual Precipitation Falling
in the Heaviest 1% of Events**



Source: Fourth National Climate Assessment, 2018
Numbers circled in black indicate % change.

Despite overall increasing precipitation, more frequent and significant summer droughts are also a projected consequence of climate change. This is due to projections that precipitation will increase in winter and spring and decrease slightly in the summer and, a result of earlier snow melt, and higher temperatures that will reduce soil moisture.

Figure 5: Projected Change in Total Annual Precipitation Falling in the Heaviest of 1% of Events for 2070-2099

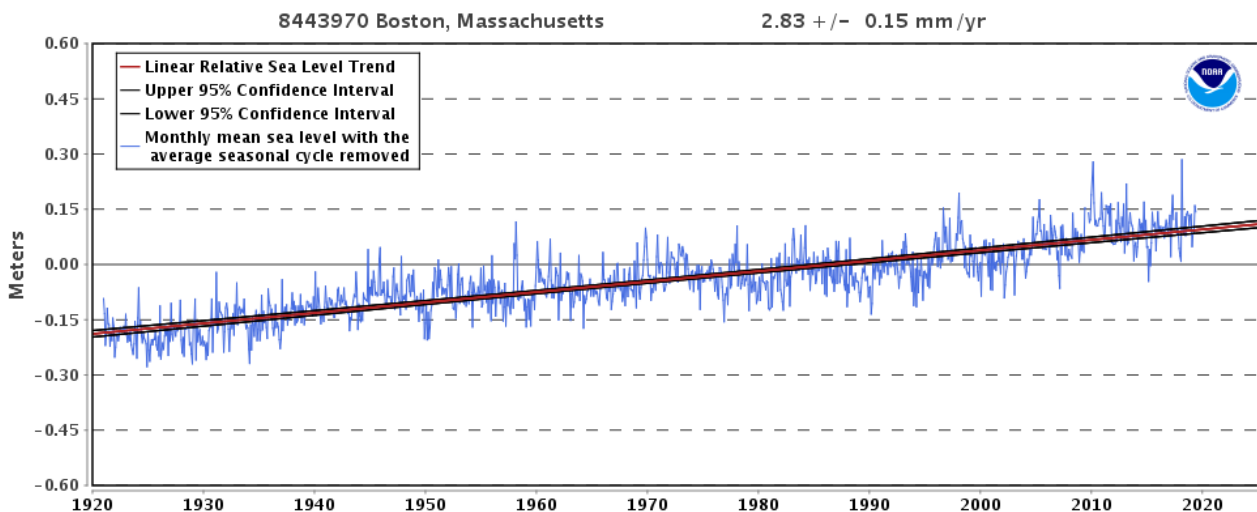


Source: Fourth National Climate Assessment, 2018

Sea Level Rise

Records from the Boston Tide Station show nearly one foot of sea level rise in the past century (Figure 6). Warming temperatures contribute to sea level rise in two ways. First, warm water expands to take up more space. Second, rising temperatures are melting land-based ice which enters the oceans as melt water. A third, quite minor, contributor to sea level rise in New England is not related to climate change. New England is still experiencing a small amount of land subsidence (drop in elevation) in response to the last glacial period.

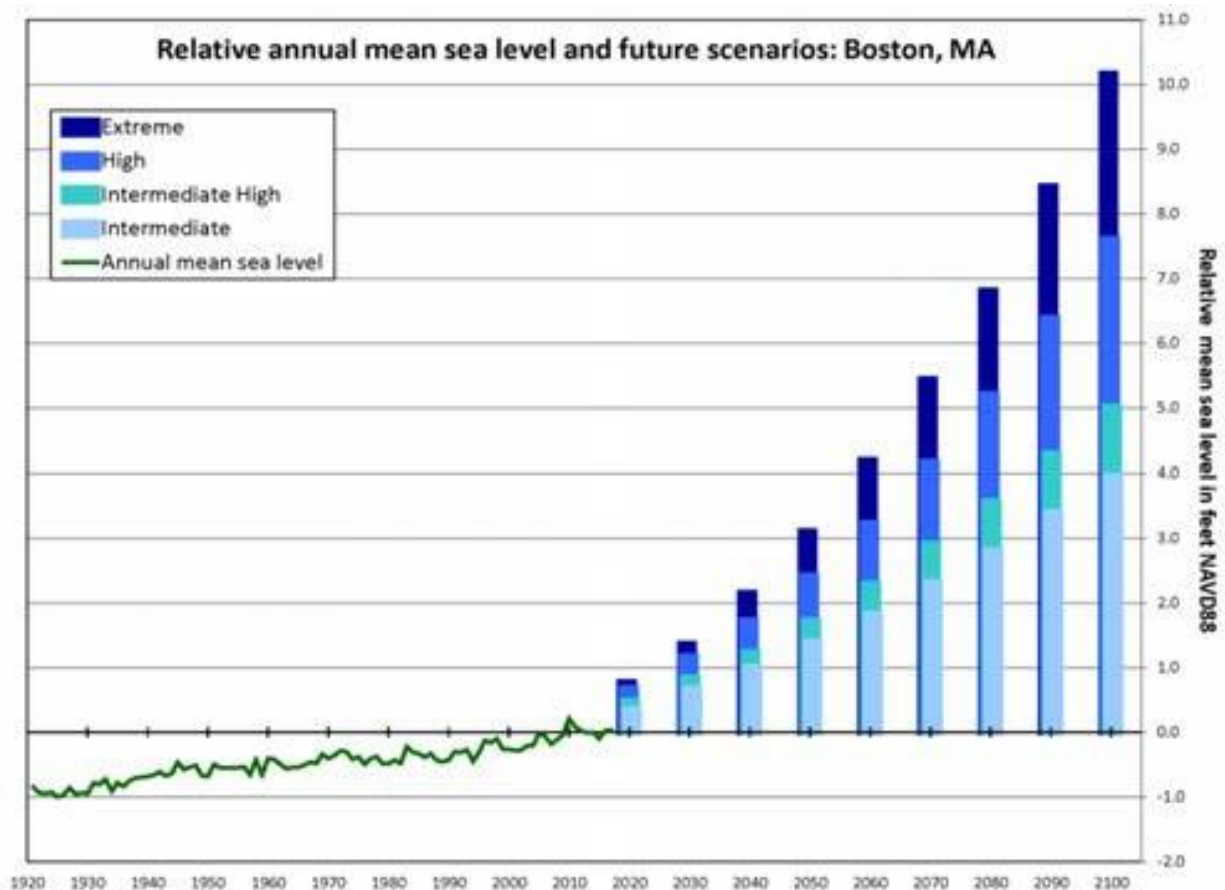
Figure 6: Observed Increase in Sea Level Rise



Source: NOAA

Projections of sea level rise through 2100 vary significantly depending on future greenhouse gas emissions and melting of land-based glaciers. Currently sea level is rising at an increasing rate. Figure 7 shows the recent rate of sea level rise, and a range of sea level rise scenarios. Projections for 2100 range from 4 feet to 10 feet. With ten feet representing the most extreme scenario. For 2050, the projections range approximately 1.5 to 3 feet.

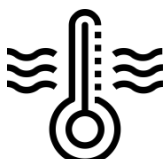
Figure 7: Recent and Projected Increase in Sea Level Rise



Source: SHMCAP

Following the general outline of the Massachusetts State Hazard Mitigation and Climate Adaptation Plan, this local hazard mitigation plan organizes consideration of natural hazards based on their relationship to projected climate changes. Table 5 below, from the SHMCAP, summarizes the natural hazards reviewed in this plan, climate interactions, and expected impacts. It should be noted that a few of the hazards listed in the 2018 Massachusetts State Hazard Mitigation plan are not applicable to the Town of Needham. Ice Jams are an unlikely natural hazard; with only two occurrences in Norfolk County in 1970 and 1971. There was no damage reported as a result of these ice jams and Needham has chosen not to profile ice jams since they are a secondary hazard. Finally, since Needham is an inland community, Needham is not vulnerable to Tsunamis, Coastal Flooding, and Coastal Erosion; hazards related to coastal areas were not addressed.

Table 5: Climate Change and Natural Hazards

Primary Climate Change Interaction	Natural Hazard	Other Climate Change Interactions	Representative Climate Change Impacts
 Changes in Precipitation	Inland Flooding	Extreme Weather	Flash flooding, urban flooding, drainage system impacts (natural and human-made), lack of groundwater recharge, impacts to drinking water supply, public health impacts from mold and worsened indoor air quality, vector-borne diseases from stagnant water, episodic drought, changes in snow-rain ratios, changes in extent and duration of snow cover, degradation of stream channels and wetland
	Drought	Rising Temperatures, Extreme Weather	
	Landslide	Rising Temperatures, Extreme Weather	
 Sea Level Rise	Coastal Flooding	Extreme Weather	Increase in tidal and coastal floods, storm surge, coastal erosion, marsh migration, inundation of coastal and marine ecosystems, loss and subsidence of wetlands
	Coastal Erosion	Changes in Precipitation, Extreme Precipitation	
	Tsunami	Rising Temperatures	
 Rising Temperatures	Average/Extreme Temperatures	N/A	Shifting in seasons (longer summer, early spring, including earlier timing of spring peak flow), increase in length of growing season, increase of invasive species, ecosystem stress, energy brownouts from higher energy demands, more intense heat waves, public health impacts from high heat exposure and poor outdoor air quality, drying of streams and wetlands, eutrophication of lakes and ponds
	Wildfires	Changes in Precipitation	
	Invasive Species	Changes in Precipitation, Extreme Weather	
 Extreme Weather	Hurricanes/Tropical Storms	Rising Temperatures, Changes in Precipitation	Increase in frequency and intensity of extreme weather events, resulting in greater damage to natural resources, property, and infrastructure, as well as increased potential for loss of life
	Severe Winter Storm / Nor'easter	Rising Temperatures, Changes in Precipitation	
	Tornadoes	Rising Temperatures, Changes in Precipitation	
	Other Severe Weather (Including Strong Wind and Extreme Precipitation)	Rising Temperatures, Changes in Precipitation	
Non-Climate-Influenced Hazards	Earthquake	Not Applicable	There is no established correlation between climate change and this hazard

OVERVIEW OF HAZARDS AND IMPACTS

Table 7 summarizes the frequency and severity of hazard risks for Massachusetts and Needham. The Massachusetts frequency assessment is based on data in the SHMCAP. The Needham frequency assessment reflects data from the National Climatic Data Center (NOAA) for Norfolk County*, from the SHMCAP** and, from the local Hazard Mitigation Team***.

Table 6: Hazards Risk Summary

Hazard	Frequency		Severity	
	Massachusetts	Needham	Massachusetts	Needham
Inland Flooding	Substantial every 3 rd year	3.2 per year*	Serious	Serious
Drought	1% any given month	1% any given month***	Minor	Minor
Landslides	Every other year	None recorded**	Minor	Minor
Coastal Flooding	6 events per year	NA	Serious	NA
Coastal Erosion	Frequency can't be measured	NA	Serious	NA
Tsunami	1 in every 39 years	NA	Extensive	NA
Extreme Temperatures	2 heat events and 1 cold event event/year	4 heat events in 10 years/2 cold events in 10 years*	Minor	Minor
Brush Fires	One notable event per year	Notable events are rare	Minor	Minor
Hurricane/Tropical Storm	One every two years	1 recorded event	Serious	Serious
Severe Winter Storms/Nor'easters	One notable event per year	1.8 per year*	Extensive	Serious
Tornadoes	1.7 per year	None recorded	Serious	Serious
Other Severe Weather (Thunderstorms/High Winds)	20-30 thunderstorms annually; 43.5 high wind events annually	3 per year*	Minor	Minor
Earthquake	10 - 15% chance of Mag 5 in 10-year period	10 - 15% chance of Mag 5 in 10-year period***	Extensive	Extensive

Severity

- **Minor:** Limited and scattered property damage; limited damage to public infrastructure and essential services not interrupted; limited injuries or fatalities.
- **Serious:** Scattered major property damage; some minor infrastructure damage; essential services are briefly interrupted; some injuries and/or fatalities.

- **Extensive:** Widespread major property damage; major public infrastructure damage (up to several days for repairs); essential services are interrupted from several hours to several days; many injuries and/or fatalities.
- **Catastrophic:** Property and public infrastructure destroyed; essential services stopped; numerous injuries and fatalities.

CHANGING PRECIPITATION PATTERNS

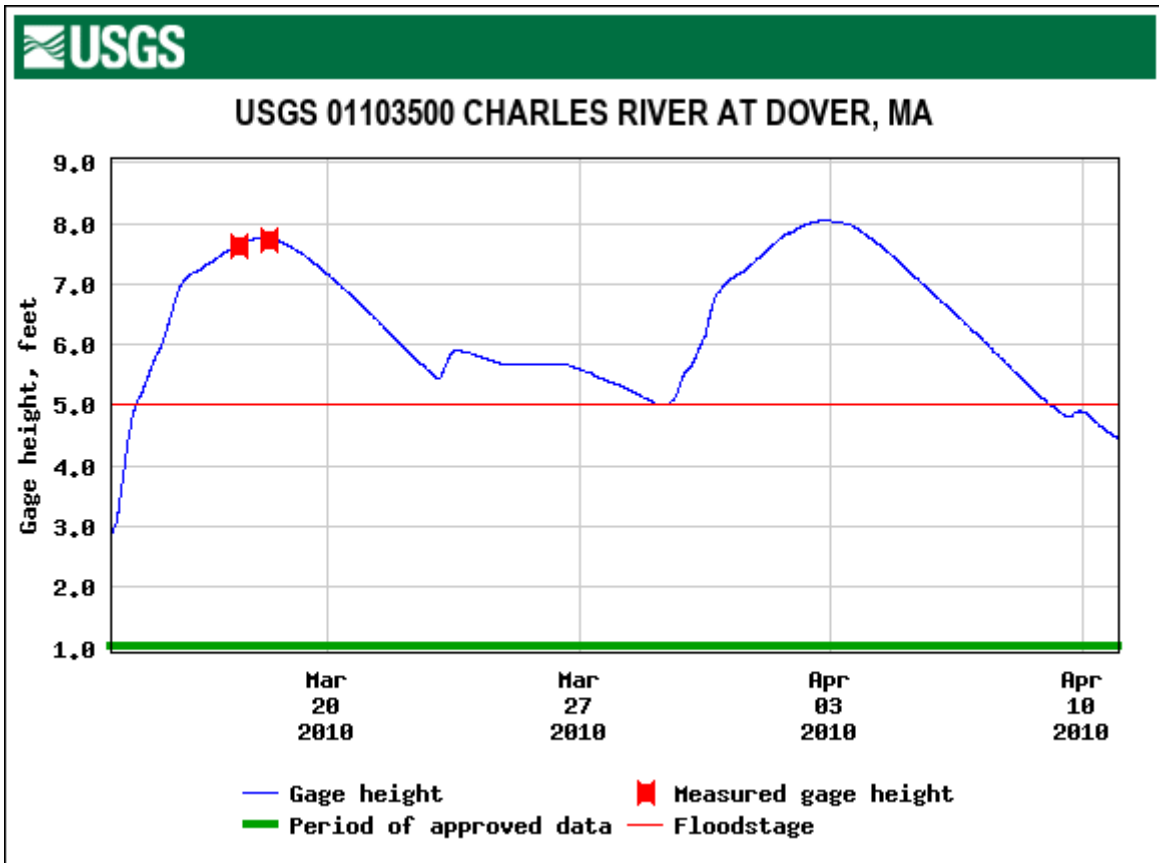
INLAND FLOODING

Inland flooding can be associated with overflowing rivers and streams, stormwater flooding associated with impervious surfaces and stormwater infrastructure, and in more rare cases ice jams, ground failures (erosion), and in some communities beaver dams. Inland flooding is generally caused by hurricanes, nor'easters, severe rainstorms, and thunderstorms. Climate change has the potential to exacerbate these issues over time due to increasing extreme rainfall events. Increase in average annual rainfall may also lead to more incidents of basement flooding caused by high seasonal groundwater levels.

Flooding was the most prevalent serious natural hazard identified by local officials in Needham. Flooding can be caused by major storms, known as northeasters and hurricanes. Northeasters can occur at any time of the year, but they are most common in winter. Hurricanes are most common in the summer and early fall. Large rain storms or snowfalls can also lead to inland flooding.

The March 2010 rainstorms fit the profile of a type of event expected to increase in frequency as the climate warms. That is, significant precipitation, falling in late winter as rain rather than snow, on frozen ground, and while vegetation is still dormant. The Blue Hill Observatory in Milton recorded 17.7 inches of rain from three storms in the 19 days from March 13 to 31. As shown in the USGS gage approximately ¼ mile downstream of South Street on the Charles River, river levels surged well above flood stage twice and stayed there for nearly a month (Figure 8). The March 2010 storms were a federally declared disaster making federal assistance available to property owners who did not carry flood insurance. Based on the claims, Needham experienced extensive flood damage, with one flood insurance claim and 231 disaster claims, 99% of which were located *outside* of FEMA Special Flood Hazard Areas. The claims were most concentrated in the more densely developed northeast half of the town. See Map 3 in Appendix B for claim locations.

Figure 8: March 2010 USGS Charles River Gage



Local data for previous flooding occurrences are not collected by the Town of Needham. The best available local data is for Norfolk County through the National Climatic Data Center. Norfolk County, which includes the Town of Needham, experienced 32 flood events from 2010 through 2019. No deaths or injuries were reported and the total reported property damage in the county was \$25 million dollars. Nearly all of the damage is attributed to the events in March 2010. This is an average of 3.2 flood events each year.

Table 7: Norfolk County Flood Events, 2010 through 2019

Date	Deaths	Injuries	Property Damage
03/14/2010	0	0	16.64M
03/29/2010	0	0	8.320M
04/01/2010	0	0	0.00K
07/24/2010	0	0	20.00K
08/05/2010	0	0	0.00K
08/25/2010	0	0	8.00K
08/28/2011	0	0	0.00K
08/15/2012	0	0	0.00K

Date	Deaths	Injuries	Property Damage
10/29/2012	0	0	0.00K
06/07/2013	0	0	0.00K
07/29/2013	0	0	0.00K
08/09/2013	0	0	15.00K
10/22/2014	0	0	0.00K
10/23/2014	0	0	0.00K
8/15/2015	0	0	0.00K
8/18/2015	0	0	0.00K
6/07/2016	0	0	5.00K
8/14/2016	0	0	5.00K
4/1/2017	0	0	5.00K
7/12/2017	0	0	0.00K
7/18/2017	0	0	1.00K
8/2/2017	0	0	0.00K
9/30/2017	0	0	10.00K
10/25/2017	0	0	0.00K
10/29/2017	0	0	0.00K
01/12/2018	0	0	0.00K
01/13/2018	0	0	0.00K
04/16/2018	0	0	0.00K
07/06/2018	0	0	10.00K
10/29/2018	0	0	0.00K
11/03/2018	0	0	0.00K
4/15/2019	0	0	0.00K
Total	0	0	25 M

Source: NOAA, National Climatic Data Center

ICE JAMS

Ice jams occur in cold weather when normally flowing water begins to freeze effectively damming the waterway and causing localized flooding in the area. Flooding may also occur when ice jams break up and ice may pile up at culverts or around bridges. There is no recent history of ice jams leading to flooding in Needham and Town staff did not identify this hazard as an issue for the town.

DAM FAILURE OR OVERTOPPING

Dams can fail because of structural problems or age, independent of any storm event. Dam failure can follow an earthquake by causing structural damage. Dams can also fail structurally because of flooding arising from a storm or they can overspill due to flooding. In the event of a dam failure, the energy of the water stored behind even a small dam can cause loss of life and property damage if there are people or buildings downstream. The number of fatalities from a dam failure depends on the amount of warning provided to the population and the number of people in the path of the dam's floodwaters.

A concern for dams in Massachusetts is that many were built in the 19th century without the benefits of modern engineering or construction oversight. In addition, some dams have not been properly maintained. The increasing intensity of precipitation is the primary climate concern related to dams, as they were most likely designed based on historic weather patterns. The SHMCAP indicates that changing precipitation patterns may increase the likelihood of overflow events. Dam failure is a highly infrequent occurrence, but a severe incident could result in loss of lives and significant property damage. According to the Association of State Dam Safety Officials, three dams have failed in Massachusetts since 1984, one of which resulted in a death.

Data in this chart from August 2018 were provided by the DCR Office of Dam Safety. The Cochrane Dam is identified as located in Dover, but it is on the Charles between Dover and Needham. Only Rosemary Lake Dam is considered a High Hazard dam.

Table 8: Status of Dams in Needham

Dam Name	River	Owner	Hazard Classification
Rosemary Lake Dam	Rosemary Brook	Town of Needham, Select Board	High
Needham Reservoir Dam	Tributary of Charles River	Town of Needham, Select Board	Low
Sabrina Lake Dam - South	No inlet	Not Available for unregulated small dams	N/A
Cochrane Dam	Charles River	Department of Conservation and Recreation	Low

Source: DCR Office of Dam Safety

DCR Dam Hazard Classification

High: Dams located where failure or mis-operation will likely cause loss of life and serious damage to homes(s), industrial or commercial facilities, important public utilities, main highways(s) or railroad(s).

Significant: Dams located where failure or mis-operation may cause loss of life and damage home(s), industrial or commercial facilities, secondary highway(s) or railroad(s)

Low: Dams located where failure or mis-operation may cause minimal property damage to others. Loss of life is not expected.

LOCALLY IDENTIFIED AREAS OF INLAND FLOODING

Information on potential flood hazard areas was taken from two sources. The first is the National Flood Insurance Rate Maps (FIRM). The FIRM flood zones are shown on Map 3 in Appendix B. The “Locally Identified Areas of Flooding” described below were identified by Town staff as areas where flooding is known to occur. These areas do not necessarily coincide with the flood zones on the FIRM maps. Flood sources include inadequate drainage systems, high groundwater, and other local conditions. The numbers correspond to the numbers on Map 8, “Local Hazard Areas.”

Table 9: Locally Identified Areas of Flooding

Map ID	Name	Description
8	Water Treatment Plant at the Dover line	According to local officials, this site is a low flood hazard that also floods infrequently, since the road was raised when reconstructed. However, Public Works Superintendent Richard Merson did note that the flooding, in certain circumstances could be quite severe and could jeopardize the town’s well field of three fresh water wells. There is no current mitigation system in place. When the need arises the town has, in the past, sand-bagged the area to protect the wells, which supply eighty percent of the town’s annual water supply. Elevating the pumps is needed.
9	Wellesley Avenue	This moderate flooding hazard does not truly threaten homes, but does flood annually at this spot, because there is a low spot in the road that does not drain easily. There is an existing dry well and catch basins along the street also. Installation of an infiltration system has reduced but not eliminated flooding.
10	Red Wing Bay	Flooding at this site relates to the Cochrane Dam and can be quite serious, impacting three to four homes near the intersection of Fisher and South streets. The area is part of an old mill site, and thus sits against the river. The site floods approximately every ten years or so and there is no existing mitigation in place. A suggested course of action would be to

		construct a bypass structure off the side of the dam, allowing flood waters to get around the dam, instead of over it and avoiding the neighborhood in question. However, town staff noted that such a project would likely be cost-prohibitive for the benefit it would provide, and the priority is considered low.
11	Rosemary Street at Rosemary Lake outfall	Although DCR classifies this location as a high hazard dam, the town is working on having the location declassified as a dam. The flooding associated with overtopping this dam is considered to be low severity and low frequency, having occurred twice in the past twenty years. No buildings were flooding as a result of those events. The town has a protocol to lower the lake to prevent flooding. There is a control weir at the top of the dam and maintenance of the exiting dam and roadway are considered to be the best mitigation to keeping the dam from becoming a hazard. There is a low priority on other mitigation for the site.
12	Dedham Avenue at the DPW complex	Flooding here is associated with a manmade retention pond or reservoir that sits on the town owned DPW land. Flooding also occurs when Charles River flooding backs up Alder Brook. Flooding does not affect any homes but can flood Dedham Avenue and affect vehicles in the DPW lots and the building itself, which sits below the reservoir.
13	Wildwood Drive at the Charles River	Contained completely within the floodplain, this neighborhood is simply located in a poor location on the banks of the Charles. Flooding at this site can be moderate to severe and flooding can occur about every ten years. Flooding does not typically impact the homes themselves, but it does impact residential backyards along the northern bank of the Charles. There is no existing mitigation to deter the water, but a coffer dam or sand bag wall could provide relief for the residents. However, since the flooding takes place within the flood plain on private property it is considered a low priority by the town and real mitigation is thought to be cost prohibitive.
14	Winding River Road	This is a moderate severity flood hazard that floods on average once every ten years. According to town officials, drainage from this street flows into the Charles River, but when water levels are elevated, the water from the street cannot release into the river and it backs up into the neighborhood. Town officials would endorse a plan to mitigate the problem, but due to lack of funding Winding River Road has not been proposed because there are higher priorities around town. However, if flooding there were to increase in severity of frequency, it is possible the town could look at a measure to allow the water to be pumped over the river bank, above the water level, in order to alleviate flooding on the street. However, such a measure would likely be too costly at this point, given the benefit it would impart.

16	Carol Road at Great Plain Avenue	Issues at this site are related to the wetlands area surrounding the intersection. When the wetlands surcharge, water backs up into an underground brook on Carol Road. Several homes along Great Plain Avenue can be impacted by backyard flooding. The flooding is considered a low severity flooding and low frequency hazard, as it occurs once every ten years or less. There is a natural drain to the wetlands, which serves as the area's only mitigation and the wetlands area is a designated and legally designed flood storage mechanism.
17	Grosvenor Road	This moderate flood hazard floods every ten years. Flooding occurred here in March 2010. Water does backup to the rear side of residential properties along the north side of the site and it can also flood an area ball field. There is an existing catch basin and a culvert under the commuter railroad tracks. The culvert needs to be enlarged. Recent development of a subdivision has improved drainage.
18	West Street at Rosemary Brook	Flooding here is moderate, with the frequency very low at every 25 years or so. There are no homes downstream of this flooding site, but there is a sewer pump station that could be in jeopardy if left unchecked in a big storm. There is a culvert under West Street that does a good job of handling the needs here in most circumstances. Potential future mitigation could include a larger culvert, if the downstream capacity indicated that such a move was acceptable. However, town officials have said they would need to study downstream capacity first and that this is a low priority.
19	Central Avenue at Rosemary Brook	Issues here are similar to those at West Street. The flooding here can be of a moderate severity, but the frequency is low, occurring only every 25 years or so. Again, officials would want to study the downstream capacity of the brook before expanding any culverts or drainage mechanisms. However, the site would likely remain a low priority to address, since the issues there are not serious or frequent.
24	Edgewater and Dedham Avenue	As with Wildwood Drive, the flooding here is contained mostly within the flood plain and the homes built along the river's edge are in the flood plain and poorly sited. However, the bank here is fairly high, and flooding is said to be moderate and not very frequent, every ten years or so. There is no real mitigation here, and flood waters can reach into backyards. In a truly high rain water event, it would be possible for flooding to reach the homes and cause damage, but since the homes are in the flood plain on the edge of a river, it is not clear what can be done. Some options could include moving utilities out of the basements, or at least off basement floors, and construction of a coffer dam or retention dam to keep flood level waters in the river and off the Priority to undertake mitigation here is considered to be low.

25	Hunnewell Street	Moderate flooding in this neighborhood in the northern section of town is also fairly infrequent, with an occurrence of about every ten years. There are existing catch basins and a culvert, but it appears the capacity of these devices is not large enough. The town designed a larger drainage pipe for the area, with an estimated cost of between \$75,000 and \$120,000 and identified this project as a high priority. However, the town was not able to obtain the easements needed for the project.
26	Walker	Flooding at this site can be severe, impacting about four homes in the area, every five years. According to town officials, the outfall from Walker Pond needs maintenance and could also use a control structure, such as a small dam with a control weir atop. Such a project is estimated to cost upwards of \$250,000 and is considered a moderate priority, because of the repetitive damage to impacted homes.
27	Oxbow Road	This moderate severity flooding hazard is a product of drain water to the Charles River backing up in the surrounding neighborhood. There is an existing drainage pipe, but it is believed to be inadequate. Suggested future mitigation for this site could include expanding the size of the drain pipe, but as with flooding at Winding River (14), elevated water levels in the Charles can also create problems with the drainage flow. Thus, it is not clear how effective an expanded drainage pipe would be when the river waters are high. The area needs more study, and there is no estimated cost or timeline developed for any future mitigation here at this point. It is considered a low priority.

REPETITIVE LOSS STRUCTURES

As defined by FEMA, a repetitive loss property is a NFIP-insured structure that has had two or more paid flood losses of \$1,000 or more in any given 10-year period since 1978. There are 5 repetitive loss properties, all single-family homes, in Needham. The properties are shown on the maps in Appendix A. These repetitive loss properties had a total of 15 losses from 1978 to 2018, totaling \$57,258 in paid claims. For more information on repetitive losses see https://www.fema.gov/txt/rebuild/repetitive_loss_faqs.txt and <https://www.fema.gov/repetitive-flood-claims-grant-program-fact-sheet>.

Table 8 summarizes the number and location of repetitive loss structures located within Needham and the number of losses and total claims associated with them.

Table 10: Summary of Repetitive Losses and Claims

	A, AE, AO, AH Zones	VE Zone	X Zones	Total
Number of Properties	0	0	5	5
Number of Losses	0	0	15	15

Total Claims	0	0	\$57,258	\$57,258
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Source: Department of Conservation and Recreation, FEMA Repetitive Loss data

DROUGHT

Drought is a temporary irregularity in precipitation and differs from aridity since the latter is restricted to low rainfall regions and is a permanent feature of climate. Drought is a period characterized by long durations of below normal precipitation. Drought conditions occur in virtually all climatic zones, yet its characteristics vary significantly from one region to another since it is relative to the normal precipitation in that region. Drought can affect agriculture, water supply, aquatic ecology, wildlife, and plant life.

Droughts are projected to increase in frequency and intensity in the summer and fall as weather patterns change. Drought impacts can include reduced groundwater and surface water levels, affecting water quality and quantity, and the organisms that rely on aquatic resources. Drought also increases stress on plant communities and, the likelihood of forest and brush fires. Communities may be affected by water use restrictions, affecting drinking water supply and outdoor water use. Economic sectors impacted could include recreation, agriculture, and forestry.

Five levels of drought have been developed to characterize drought severity: Normal, Advisory, Watch, Warning, and Emergency. These drought levels are based on the conditions of natural resources and are intended to provide information on the current status of water resources. The levels provide a basic framework from which to take actions to assess, communicate, and respond to drought conditions.

Needham does not collect data relative to drought events. Because drought tends to be a regional natural hazard, this plan references state data as the best available data for drought. Drought is a town wide hazard in Needham. The SHMCAP using data collected since 1850, calculates that statewide there is a 1% chance of being in a drought emergency in any given month. For drought warning and watch levels, the chance is 2% and 8% respectively in any given month (Table 9).

Table 11: Frequency of Massachusetts Drought Levels

Drought Level	Frequency Since 1850	Probability of Occurrence in a Given Month
Drought Emergency	5 occurrences	1% chance
Drought Warning	5 occurrences	2% chance
Drought Watch	46 occurrences	8% chance

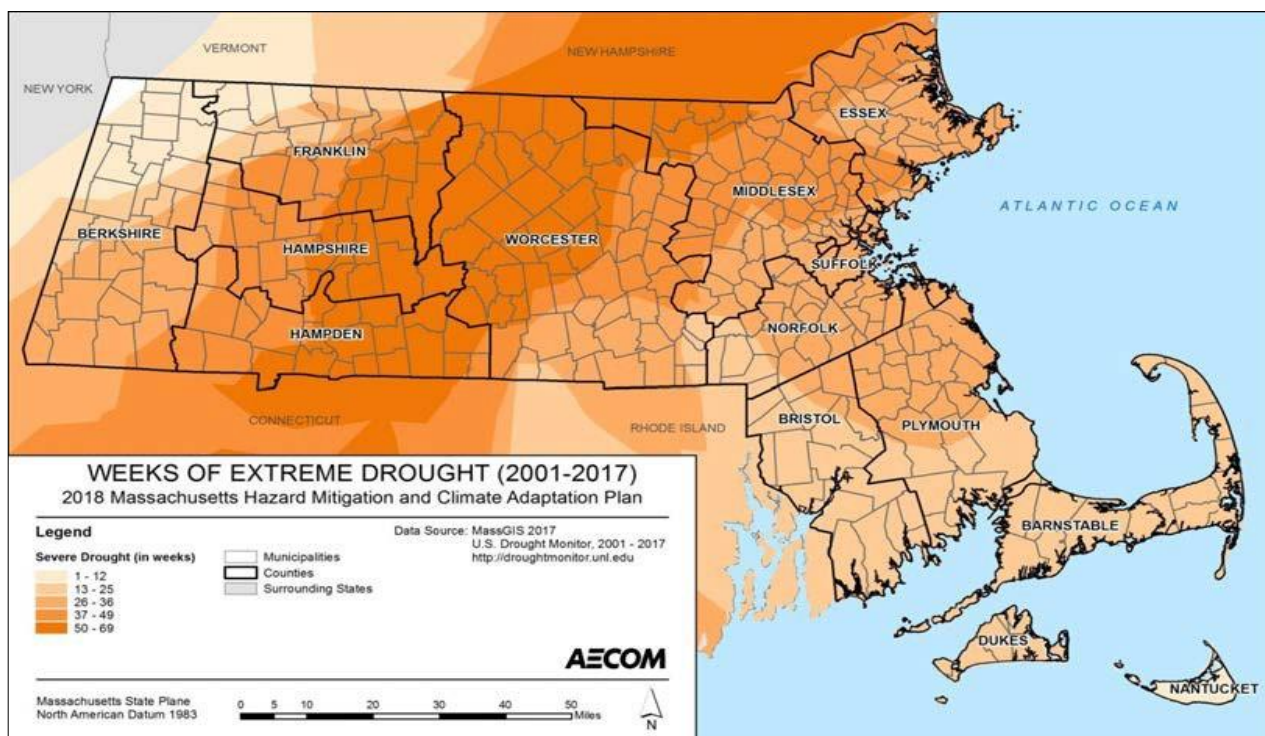
Source: SHMCAP

Drought emergencies have been reached infrequently, with five events occurring between 1850 and 2012: 1883, 1911, 1941, 1957, and 1965 to 1966. Due to its long duration, the drought from 1965 to 1966 is viewed as the most severe drought to have occurred in Massachusetts in

modern times. The drought that extended from July 2016 to April 2017 reached the Drought Warning level. Determinations regarding the end of a drought or reduction of the drought level focus on two key drought indicators: precipitation and groundwater levels. These two factors have the greatest long-term impact on stream flow, water supply, reservoir levels, soil moisture, and the potential for forest fires.

The U.S. Drought Monitor characterizes droughts as moderate, severe, extreme, or exceptional. Severe drought is characterized by likely crop and pasture losses, water shortages, and water restrictions. As shown in Figure 9 below, Needham experienced between 26 and 36 weeks of severe drought between 2001 and 2017. Drought affects Needham's drinking water supply. In the most recent drought town officials note that excessive lawn watering caused the town to exceed permitted well water pumping levels.

Figure 9: Weeks of Severe Drought (2001-2017)



Source: SHMCP

LANDSLIDES

According to the U.S. Geological Survey, "The term landslide includes a wide range of ground movement, such as rock falls, deep failure of slopes, and shallow debris flows. Although gravity acting on an over steepened slope is the primary reason for a landslide, there are other contributing factors." Among the contributing factors are: erosion by rivers or ocean waves over steepened slopes; rock and soil slopes weakened through saturation by snowmelt or heavy rains; earthquake created stresses that make weak slopes fail; excess weight from accumulation of rain or snow; and stockpiling of rock or ore from waste piles or man-made structures. In Massachusetts,

according to the SHMCAP, the most common cause of landslides are geologic conditions combined with steep slopes and/or heavy rains. Landslides associated with heavy rains typically occur on steep slopes with permeable soils underlain by till or bedrock.

Landslides can result from human activities that destabilize an area or can occur as a secondary impact from another natural hazard, such as flooding. In addition to structural damage to buildings and the blockage of transportation corridors, landslides can lead to sedimentation of water bodies. Typically, a landslide occurs when the condition of a slope changes from stable to unstable. Natural precipitation such as heavy snow accumulation, torrential rain, and run-off may saturate soil, creating instability enough to contribute to a landslide. More frequent extreme rain events may increase the chance of landslides as saturated soils are conducive to landslides. Drought may also increase the likelihood of landslides if loss of vegetation decreases soil stability.

The SHMCAP, utilizing data from the MA Department of Transportation from 1986 to 2006 to estimates that, on average, roughly one to three known landslides have occurred each year. A slope stability map published by the MA Geological Survey and UMass-Amherst indicates that the most significant risk of landslide is in western Massachusetts.

Needham is classified as having low susceptibility and a low incidence of landslides (see Map 4, Appendix B). Should a landslide occur in the future, the type and degree of impacts would be highly localized. The town's vulnerabilities could include damage to structures, damage to transportation and other infrastructure, and localized road closures. Injuries and casualties, while possible, would be unlikely given the low extent and impact of landslides in Needham. There are no recorded instances of landslides having occurred in the Town of Needham.

RIISING TEMPERATURES

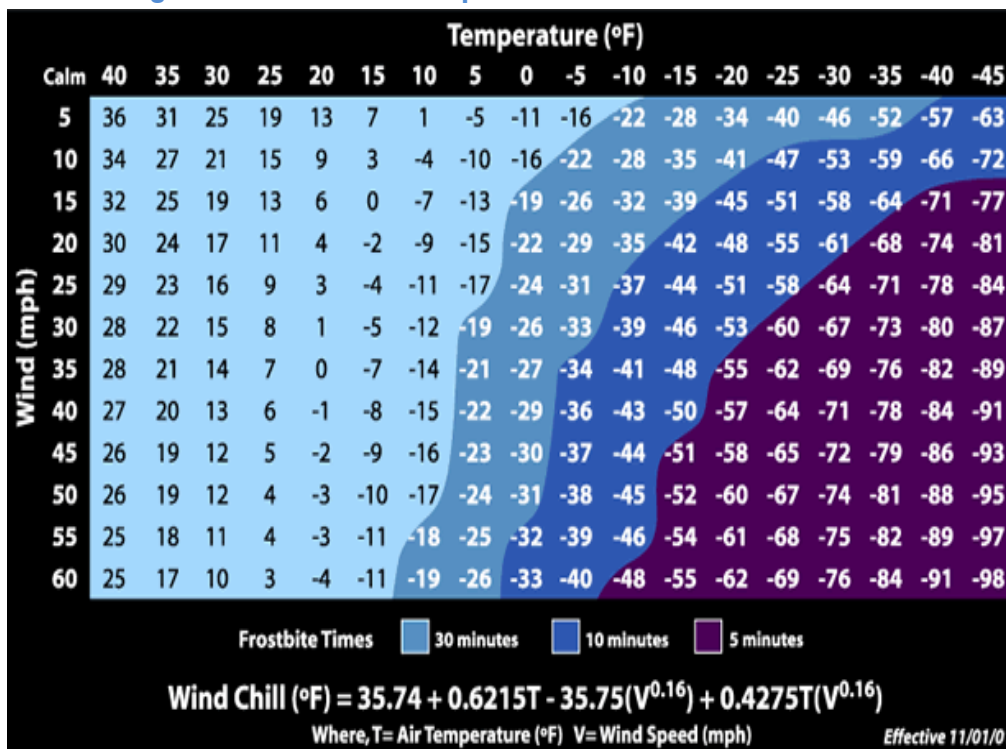
AVERAGE AND EXTREME TEMPERATURES

Extreme temperatures occur when either high temperature or low temperatures relative to average local temperatures occur. These can occur for brief periods of time and be acute, or they can occur over long periods of time where there is a long stretch of excessively hot or cold weather. Needham has four well-defined seasons. The seasons have several defining factors, with temperature one of the most significant. Extreme temperatures can be defined as those that are far outside of the normal seasonal ranges for Massachusetts

EXTREME COLD

Extreme cold temperature is typically measured using the Wind Chill Temperature Index, which is provided by the National Weather Service (NWS). The wind chill is the apparent temperature felt on exposed skin due to the combination of air temperature and wind speed. The index is provided in Figure 11 below. Extreme cold is a dangerous situation that can result in health emergencies for susceptible people, such as those without shelter, those who are stranded, or those who live in homes that are poorly insulated or without heat.

Figure 10 Wind Chill Temperature Index and Frostbite Risk



Source: National Weather Service

The Town of Needham does not collect data for previous occurrences of extreme cold. The best available local data are for Norfolk County, through the National Climatic Data Center (NCDC). There have been two extreme cold events in the past ten years, which caused no deaths, no injuries, or property damage. This is an average of one event every 5 years. Extreme cold is a town wide hazard for Needham.

Table 12: Norfolk County Extreme Cold and Wind Chill Occurrences 2010-2019

Date	Deaths	Injuries	Damages
2/16/2015	0	0	0
2/14/2016	0	0	0

Source: NOAA, National Climatic Data Center

EXTREME HEAT

A heat wave in Massachusetts is defined as three or more consecutive days above 90°F. Another measure used for identifying extreme heat events relies on the Heat Index. According to the National Weather Service (NWS), the Heat Index is a measure of how hot it really feels relative humidity is factored in with the actual air temperature. The NWS issues an advisory when the heat index (Figure 12) is forecast to exceed 100°F for two or more hours; an excessive heat advisory is issued if the forecast predicts the temperature will rise above 105°F.

Figure 11: Heat Index Chart

		Temperature (°F)																
Relative Humidity (%)		80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110	
	40	80	81	83	85	88	91	94	97	101	105	109	114	119	124	130	136	
	45	80	82	84	87	89	93	96	100	104	109	114	119	124	130	137		
	50	81	83	85	88	91	95	99	103	108	113	118	124	131	137			
	55	81	84	86	89	93	97	101	106	112	117	124	130	137				
	60	82	84	88	91	95	100	105	110	116	123	129	137					
	65	82	85	89	93	98	103	108	114	121	128	136						
	70	83	86	90	95	100	105	112	119	126	134							
	75	84	88	92	97	103	109	116	124	132								
	80	84	89	94	100	106	113	121	129									
	85	85	90	96	102	110	117	126	135									
	90	86	91	98	105	113	122	131										
	95	86	93	100	108	117	127											
	100	87	95	103	112	121	132											
Category		Heat Index					Health Hazards											
Extreme Danger		130 °F – Higher					Heat Stroke or Sunstroke is likely with continued exposure.											
Danger		105 °F – 129 °F					Sunstroke, muscle cramps, and/or heat exhaustion possible with prolonged exposure and/or physical activity.											
Extreme Caution		90 °F – 105 °F					Sunstroke, muscle cramps, and/or heat exhaustions possible with prolonged exposure and/or physical activity.											
Caution		80 °F – 90 °F					Fatigue possible with prolonged exposure and/or physical activity.											

The Town of Needham does not collect data on excessive heat occurrences. The best available local data are for Norfolk County, through the National Climatic Data Center. In the past ten years there has been one excessive heat day and no deaths, injuries, or property damage (see Table 11). This is an average of one extreme heat occurrence every 2.5 years.

Table 13: Norfolk County Extreme Heat Occurrences 2010-2019

Date	Deaths	Injuries	Damage
7/22/2011	0	0	0
7/1/2018	0	0	0
7/3/2018	0	0	0
8/28/2018	0	0	0

Source: NOAA, National Climatic Data Center

Extreme cold events are predicted to decrease in the future, while extreme heat days, as well as average temperatures are projected to increase. The projected increase in extreme heat and heat waves is the source of one of the key health concerns related to climate change. Prolonged exposure to high temperatures can cause heat-related illnesses, such as heat cramps, heat exhaustion, heat stroke, and death. Heat exhaustion is the most common heat-related illness and if untreated, it may progress to heat stroke. People who perform manual labor, particularly those who work outdoors, are at increased risk for heat-related illnesses. Prolonged heat exposure and the poor air quality and high humidity that often accompany heat waves can also exacerbate pre-existing conditions, including respiratory illnesses, cardiovascular disease, and mental illnesses.

Older adults are often at elevated risk due to a high prevalence of pre-existing and chronic conditions. People who live in older housing stock and in housing without air conditioning have increased vulnerability to heat-related illnesses. Power failures are more likely to occur during heat waves, affecting the ability of residents to remain cool during extreme heat. Individuals with pre-existing conditions and those who require electric medical equipment may be at increased risk during a power outage.

Due to what is termed the “heat island effect”, areas with less shade and more dark surfaces (pavement and roofs) will experience even hotter temperatures; these surfaces absorb heat during the day and release it in the evening, keeping nighttime temperatures warmer as well. Map 10 in Appendix B displays areas that are among the hottest 5% of land in the MAPC region based on land surface temperature derived from satellite imagery on July 13, 2016, when the high temperature at Logan Airport was 92°F. The southwest half of Needham has extensive tree cover and no “hot spots”. The business and commercial areas along Route 128 that have extensive pavement, and buildings form a large hot spot. The areas surrounding the Needham Heights and Needham Center commuter rail stations are also hot spots. Many of the schools including Broadmeadow, Newman, Pollard, Walker, St. Sebastian, and the high school are in hot spots, again due to the prevalence of pavement and buildings. It is worth noting however, that heat impacts are more likely to be felt by residents without air conditioning, by those who work outdoors, and those with underlying health conditions.

WILDFIRE

A wildfire is a non-structure fire occurring in a forested, shrub or grassland areas. In the Boston Metro region these fires rarely grow to the size of a wildfire, as seen more typically in the western U.S. A more likely occurrence is brush fires that typically burn no more than the underbrush of a forested area. There are three different classes of wildfires:

- Surface fires are the most common type and burn along the floor of a forest, moving slowly and killing or damaging trees
- Ground fires are usually started by lightning and burn on or below the forest floor
- Crown fires spread rapidly by wind, jumping along the tops of trees

A wildfire differs greatly from other fires by its extensive size, the speed at which it can spread out from its original source, its potential to unexpectedly change direction, and its ability to jump gaps such as roads, rivers, and fire breaks. Wildfire season can begin in March and usually ends in late November. The majority of wildfires typically occur in April and May, when most vegetation is void of any appreciable moisture, making them highly flammable. Once “green-up” takes place in late May to early June, the fire danger usually is reduced somewhat. As the climate warms, drought and warmer temperatures may increase the risk of wildfire as vegetation dries out and becomes more flammable.

Fires can present a hazard where there is the potential to spread into developed or inhabited areas, particularly residential areas where sufficient fuel materials might exist to allow the fire the spread into homes. Protecting structures from fire poses special problems and can stretch firefighting resources to the limit. If heavy rains follow a fire, other natural disasters can occur, including landslides, mudflows, and floods. If the wild fire destroys the ground cover, then erosion becomes one of several potential problems.

POTENTIAL BRUSHFIRE HAZARD AREAS

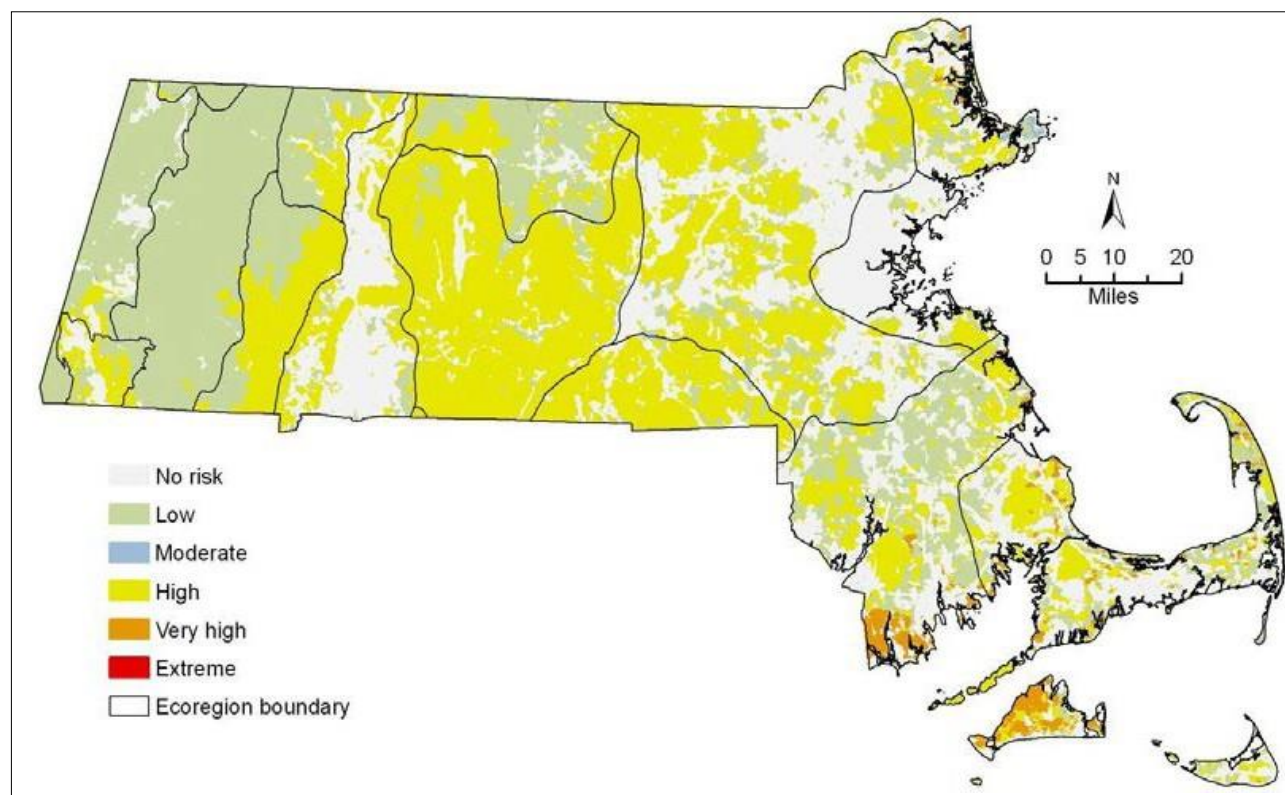
The SCHMCAP includes a graphic that depicts statewide fire risk incorporating three risk components: fuel, wildland-urban interface, and topography (Figure 12). The wildland-urban interface reflects communities where housing and vegetation intermingle, and fire can spread from structures to vegetated areas. The most susceptible fuels are pitch pine, scrub oak and oak forests. Topography can affect the behavior of fires, as fire spreads more easily uphill. Needham is shown in the moderate and high-risk zones. Fire was not identified as a common occurrence, but for some locations concern was expressed that access to forested areas and to adequate water supply could be a challenge. The most common cause of wildfires is the careless disposal of smoking materials and untended campfires.

The following areas of town were identified as having the highest potential for brush fires. The numbers correspond to the numbers on Map 8, “Hazard Areas”:

Table 14: Locally Identified Areas of Brushfire Risk

Map ID	Name	Description
1	Cutler Park	There have been both brush and bog fires here in recent years. Both water supply and physical access are problematic. The town has to shuttle in water and use out of town sources for supply.
2	Town Forest	There have been brushfires here. Water supply is a problem. Access is also an issue as the access roads need maintenance.
3	Ridge Hill Reservation	There was a meadow fire here in recent years.
4	Olin College	There have been no recent fires here.
5	New Pond (Hemlock Gorge)	This is DCR property. There is good access.
6	Echo Bridge (aqueduct)	This is DCR property. There is good access.
7	Brookside Road	This is an area of fire concern, both water supply and access are issues.

Figure 12: Wildfire Risk Areas



Source: SHMCAP

While there are substantial areas of fire risk, town officials indicate that significant brush fires are not a common occurrence.

INVASIVE SPECIES

The 2018 SHMCAP includes invasive species as a natural hazard for the first time. They are defined as “non-native species that cause or are likely to cause harm to ecosystems, economies, and/or public health”. Town officials indicated that invasives have had a negative effect on the health of forested water supply lands.

EXTREME WEATHER

HURRICANES AND TROPICAL STORMS

A hurricane is a violent wind and rainstorm with wind speeds of 74 to 200 miles per hour. A hurricane is strongest as it travels over the ocean and is particularly destructive to coastal property as the storm hits land. A tropical storm has similar characteristics, but wind speeds are below 74 miles per hour. Climate models suggest that hurricanes and tropical storms will become more intense as warmer ocean waters provide more fuel for the storms. In addition, rainfall amounts associated with hurricanes are predicted to increase because warmer air can hold more water vapor. Since 1900, 39 tropical storms have impacted New England (NESEC).

Massachusetts has experienced approximately 32 tropical storms, nine Category 1 hurricanes, five Category 2 hurricanes and one Category 3 hurricane.

Although uncommon, the Town of Needham's entire area is vulnerable to hurricanes, which occur between June and November. As shown on Map 5 in Appendix B, a tropical storm tracked through Needham in 1944. A hurricane or storm track is the line that delineates the path of the eye of a hurricane or tropical storm. The town also experiences the impacts of the wind and rain from hurricanes and tropical storms regardless of whether the storm track passed through the town. The hazard mapping indicates that the 100-year wind speed in Needham is 110 miles per hour.

Table 15: Hurricane Records for Massachusetts, 1938 to 2018

Hurricane Event	Date
Great New England Hurricane*	September 21, 1938
Great Atlantic Hurricane*	September 14-15, 1944
Hurricane Doug	September 11-12, 1950
Hurricane Carol*	August 31, 1954
Hurricane Edna*	September 11, 1954
Hurricane Diane	August 17-19, 1955
Hurricane Donna	September 12, 1960
Hurricane Gloria	September 27, 1985
Hurricane Bob	August 19, 1991
Hurricane Earl	September 4, 2010
Tropical Storm Irene	August 28, 2011
Hurricane Sandy	October 29-30, 2012

*Category 3

Source: National Oceanic and Atmospheric Administration

Hurricane intensity is measured according to the Saffir/Simpson scale, which categorizes hurricane intensity linearly based upon maximum sustained winds, barometric pressure, and storm surge potential. These are combined to estimate potential damage. The following gives an overview of the wind speeds, surges, and range of damage caused by different hurricane categories:

Table 16: Saffir/Simpson Scale

Scale No. (Category)	Winds (mph)	Surge (ft)	Potential Damage
1	74 – 95	4 - 5	Minimal
2	96 – 110	6 - 8	Moderate
3	111 – 130	9 - 12	Extensive
4	131 – 155	13 - 18	Extreme
5	> 155	>18	Catastrophic

Source: NOAA

Hurricanes typically have regional impacts beyond their immediate tracks. Falling trees and branches are a significant problem because they can result in power outages when they fall on power lines or block traffic and emergency routes. Hurricanes are a town-wide hazard in Needham. Potential hurricane damages to Needham have been estimated using HAZUS-MH. Total damages are estimated at \$36 million for a Category 2 hurricane and \$138 million for a Category 4 hurricane. Hurricanes and tropical storms are an infrequent event having passed directly through Needham only once.

SEVERE WINTER STORM/NOR'EASTER

A northeast storm, known as a nor'easter, is typically a large counterclockwise wind circulation around a low-pressure center. Featuring strong northeasterly winds blowing in from the ocean over coastal areas, nor'easters are relatively common in the winter months in New England occurring one to two times a year. The storm radius of a nor'easter can be as much as 1,000 miles and these storms feature sustained winds of 10 to 40 mph with gusts of up to 70 mph. These storms are accompanied by heavy rain or snow, depending on temperatures. Many of the historic flood events identified in the previous section were precipitated by nor'easters, including the "Perfect Storm" event in 1991. More recently, blizzards in February 2013, January 2015, and in March 2018 were large nor'easters that caused significant snowfall amounts.

Needham is vulnerable to both the wind and precipitation that accompany nor'easters. High winds can cause damage to structures, fallen trees, and downed power lines leading to power outages. Intense rainfall can overwhelm drainage systems causing localized flooding of rivers and streams as well as urban stormwater ponding and localized flooding. Fallen tree limbs as well as heavy snow accumulation and intense rainfall can impede local transportation corridors, and block access for emergency vehicles. Nor'easters are also a cause of coastal flooding.

A blizzard is a winter snow storm with sustained or frequent wind gusts to 35 mph or more, accompanied by falling or blowing snow which reduces visibility to or below ¼ mile. These conditions must be the predominant condition over a three-hour period. Extremely cold temperatures are often associated with blizzard conditions but are not a formal part of the definition. The hazard related to the combination of snow, wind, and low visibility significantly increases when temperatures drop below 20 degrees.

The National Weather Service defines "heavy snow fall" as an event generating at least four inches of snowfall within a 12-hour period. Blizzards and winter storms are often associated with a Nor'easter event, a large counterclockwise wind circulation around a low-pressure center often resulting in heavy snow, high winds, and rain.

The National Weather Service defines "heavy snow fall" as an event generating at least four inches of snowfall within a 12-hour period. The Northeast Snowfall Impact Scale (NESIS), developed by Paul Kocin of The Weather Channel and Louis Uccellini of the National Weather Service (Kocin and Uccellini, 2004), characterizes and ranks high impact northeast snowstorms.

These storms have large areas of 10-inch snowfall accumulations and greater. NESIS has five categories: Extreme, Crippling, Major, Significant, and Notable. NESIS scores are a function of the area affected by the snowstorm, the amount of snow, and the number of people living in the path of the storm. The largest NESIS values result from storms producing heavy snowfall over large areas that include major metropolitan centers. The NESIS categories are summarized below:

Table 17: NESIS Categories

Category	NESIS	Value Description
1	1 – 2.499	Notable
2	2.5 – 3.99	Significant
3	4 – 5.99	Major
4	6 – 9.99	Crippling
5	10+	Extreme

Source: Massachusetts State Hazard Mitigation Plan, 2013

The most significant winter storm in recent history was the “Blizzard of 1978,” which resulted in over three feet of snowfall and multiple day closures of roadways, businesses, and schools. In Needham, blizzards and severe winter storms have occurred in the following years:

Table 18: Severe Weather Major Disaster Declarations in Eastern MA

Storm Event	Date
Severe Winter Storm and Snowstorm	March 2018
Severe Winter Storm, Snowstorm, and Flooding	January 2015
Severe Winter Storm, Snowstorm, and Flooding	February 2013
Hurricane Sandy	October/November 2012
Severe Storm and Snowstorm	October 2011
Tropical Storm Irene	August 2011
Severe Winter Storm and Snowstorm	January 2011
Severe Winter Storm and Flooding	December 2008
Severe Storms and Inland and Coastal Flooding	April 2007
Severe Storm and Flooding	October 2005
Severe Storms & Flooding	March 2001
Blizzard	January 1966
Winter Coastal Storm	December 1992
Severe Coastal Storm	October 1991
Hurricane Bob	August 1991
Hurricane Gloria	September 1985

Coastal Storm, Flood, Ice, Snow	February 1978
Hurricane, floods	August 1955
Hurricanes	September 1954

Source: FEMA

As with hurricanes, warmer ocean water and air will provide more fuel for storms. According to the SHMCAP it appears that Atlantic coast nor'easters are increasing in frequency and intensity.

Winter storms, including heavy snow, blizzards, and ice storms, are the most common and most familiar of the region's hazards that affect large geographic areas. The majority of blizzards and ice storms in the region cause more inconvenience than they do serious property damage, injuries, or deaths. However, periodically, a storm will occur which is a true disaster, and necessitates intense large-scale emergency response. The impacts of winter storms are often related to the weight of snow and ice, which can cause roof collapses and also causes tree limbs to fall. This in turn can cause property damage and potential injuries. Power outages may also result from fallen trees and utility lines.

Winter storms are a potential town-wide hazard in Needham. Map 6 in Appendix A indicates that the average annual average snowfall in most of Needham is between 48 and 72 inches. A number of public safety issues can arise during snow storms. Impassible streets are a challenge for emergency vehicles and affect residents and employers. Snow-covered sidewalks force people to walk in streets, which are already less safe due to snow, slush, puddles, and ice. Large piles of snow can also block sight lines for drivers, particularly at intersections. Refreezing of melting snow can cause dangerous roadway conditions. In addition, transit operations may be impacted, as they were in the 2015 blizzards which caused the closure of the MBTA system for one day and limited services on the commuter rail for several weeks.

The Town of Needham does not keep local records of winter storms. Data for Norfolk County is the best available data to help understand previous occurrences and impacts of heavy snow events. According to National Climate Data Center (NCDC) records, from 2010 through 2019, western Norfolk County experienced 18 heavy snowfall events, resulting in no injuries, deaths, or property damage (Table 18).

Table 19: Heavy Snow Events and Impacts in Norfolk County, 2010 through 2019

Date	Deaths	Injuries	Property Damage (\$)
1/12/2011	0	0	0
1/26/2011	0	0	0
12/29/2012	0	0	5K
2/8/2013	0	0	0
3/7/2013	0	0	0
3/18/2013	0	0	0
12/14/2013	0	0	0

Date	Deaths	Injuries	Property Damage (\$)
1/2/2014	0	0	0
1/21/2014	0	0	0
2/5/2014	0	0	0
1/26/2015	0	0	0
2/2/2015	0	0	0
2/8/2015	0	0	0
2/14/2015	0	0	0
1/23/16	0	0	0
2/5/2016	0	0	100K
3/14/2017	0	0	0
11/15/2018	0	0	0
Total	0	0	105K

Source: NOAA, National Climatic Data Center

Heavy snow is considered to be high frequency events based on past occurrences, as there have been 18 events in the past ten years, for an average of almost 2 events each winter. As with nor'easters, warmer ocean water and air will provide more fuel for storms. According to the SHMCAP changing atmospheric patterns favor the development of winter storms.

TORNADO

A tornado is a violent windstorm characterized by a twisting, funnel-shaped cloud. These events are spawned by thunderstorms and occasionally by hurricanes and may occur singularly or in multiples. They develop when cool air overrides a layer of warm air, causing the warm air to rise rapidly. Most vortices remain suspended in the atmosphere. Should they touch down, they become a force of destruction. Some ingredients for tornado formation include:

- Very strong winds in the mid and upper levels of the atmosphere
- Clockwise turning of the wind with height (from southeast at the surface to west aloft)
- Increasing wind speed with altitude in the lowest 10,000 feet of the atmosphere (i.e., 20 mph at the surface and 50 mph at 7,000 feet)
- Very warm, moist air near the ground with unusually cooler air aloft
- A forcing mechanism such as a cold front or leftover weather boundary from previous shower or thunderstorm activity

Tornado damage severity is measured by the Fujita Tornado Scale, in which wind speed is not measured directly but rather estimated from the amount of damage. As of February 1, 2007, the National Weather Service began rating tornadoes using the Enhanced Fujita-scale (EF-scale), which allows surveyors to create more precise assessments of tornado severity. The EF-scale is summarized below:

Table 20: Enhanced Fujita Scale

Fujita Scale			Derived		Operational EF Scale	
F Number	Fastest ¼ mile (mph)	3-second gust (mph)	EF Number	3-second gust (mph)	EF Number	3-second gust (mph)
0	40 – 72	45 – 78	0	65 – 85	0	65 – 85
1	73 – 112	79 – 117	1	86 – 109	1	86 – 110
2	113 – 157	118 – 161	2	110 – 137	2	111 – 135
3	158 – 207	162 – 209	3	138 – 167	3	136 – 165
4	208 – 260	210 – 261	4	168 – 199	4	166 – 200
5	261 – 318	262 – 317	5	200 – 234	5	Over 200

Source: Massachusetts State Hazard Mitigation Plan, 2013

The frequency of tornadoes in eastern Massachusetts is low; on average, there are six tornadoes that touchdown somewhere in the Northeast region every year. The strongest tornado in Massachusetts history was the Worcester Tornado in 1953 (NESEC). Recent tornado events in Massachusetts were in Springfield in 2011 and in Revere in 2014. The Springfield tornado caused significant damage and resulted in four deaths in June of 2011. The Revere tornado touched down in Chelsea just south of Route 16, moved north into Revere's business district along Broadway, and ended near the intersection of Routes 1 and 60. The path was approximately two miles long and 3/8 mile wide, with wind speeds up to 120 miles per hour. Approximately 65 homes had substantial damages and 13 homes and businesses were rendered uninhabitable.

Since 1950, there have been eleven tornadoes in Norfolk County recorded by the Tornado History Project. On August 9, 1972 a tornado crossed through Needham from Great Plain Avenue and Webster Street and northeast into Newton resulting in one fatality and six injuries. There have been one F3 and one F2, and three F1 tornadoes. These eleven tornadoes resulted in a total of one fatality and 23 injuries and \$4.1 million in damages, as summarized in Table 22. This an average of one tornado every 6 years.

Table 21: Tornado Records for Norfolk County

Date	Fujita	Fatalities	Injuries	Width	Length	Damage
June 1953	3	0	17	667	28	\$500K – 5M
11/21/1956	2	0	0	17	0.1	\$500-\$5000
8/9/1972	1	1	6	30	4.9	\$5K-\$50K
9/6/1973	1	0	0	10	1.1	\$5K-\$50K
7/10/1989	0	0	0	23	0.1	\$500-\$5000
5/18/1990	0	0	0	10	0.2	\$500-\$5000
5/18/1990	0	0	0	10	0.2	\$500-\$5000
6/30/2001	0	0	0	80	0.1	-
8/21/2004	1	0	0	40	6	\$1,500,000
5/9/2013	0	0	0	50	0.38	\$20,000
06/23/2015	0	0	0	200	0.48	-

Source: The Tornado History Project

Buildings constructed prior to current building codes may be more vulnerable to damages caused by tornadoes. Evacuation of impacted areas may be required on short notice. Sheltering and mass feeding efforts may be required along with debris clearance, search and rescue, and emergency fire and medical services. Key routes may be blocked by downed trees and other debris, and widespread power outages are also typically associated with tornadoes.

Although tornadoes are a potential town-wide hazard in Needham, tornado impacts are relatively localized compared to severe storms and hurricanes. Damages from any tornado in Needham would greatly depend on the track of the tornado. Based on the record of previous occurrences since 1956, Tornado events in Needham are a low frequency event as there is only one instance of tornado activity in Needham. According to the SHMCAP, it is possible that severe thunderstorms which can include tornadoes may increase in frequency and intensity. However, scientists have less confidence in the models that seek to project future changes in tornado activity.

OTHER SEVERE WEATHER

SEVERE THUNDERSTORMS

While less severe than the other types of storms discussed, thunderstorms can lead to localized damage and represent a hazard risk for communities. A thunderstorm typically features lightning, strong winds, rain, and/or hail. Thunderstorms sometime give rise to tornados. On average, these storms are only around 15 miles in diameter and last for about 30 minutes. A severe thunderstorm can include winds of close to 60 mph and rain sufficient to produce flooding.

The best available data on previous occurrences of thunderstorms in Needham is for is for Norfolk County through the National Climatic Data Center (NCDC). For the years 2010 through 2019, NCDC records show 30 thunderstorm events in Norfolk County (Table 21). These storms resulted in a total of \$307,500 in property damage. There were no injuries or deaths reported. This is an average of 3 events per year.

Table 22: Norfolk County Thunderstorm Events, 2010 to 2019

DATE	MAGNITUDE	DEATHS	INJURIES_DIRECT	PROPERTY DAMAGE
6/6/2010	53	0	0	0
6/20/2010	50	0	0	5,000
6/24/2010	50	0	0	0
8/19/2011	50	0	0	1,000
6/23/2012	50	0	0	25,000
8/10/2012	50	0	0	5,000
8/15/2012	40	0	0	500
6/17/2013	50	0	0	3,000
7/29/2013	50	0	0	20,000
7/3/2014	50	0	0	20,000

7/28/2014	60	0	0	50,000
6/23/2015	50	0	0	5,000
8/4/2015	50	0	0	10,000
8/15/2015	50	0	0	10,000
2/25/2016	50	0	0	15,000
6/7/2016	50	0	0	10,000
7/18/2016	50	0	0	50,000
7/22/2016	50	0	0	50,000
7/23/2016	40	0	0	5,000
8/14/2016	50	0	0	5,000
6/9/2017	45	0	0	1,000
6/13/2017	48	0	0	1,000
6/23/2017	50	0	0	1,000
8/2/2017	50	0	0	2,500
9/6/2017	50	0	0	1,000
7/17/2018	45	0	0	3,000
9/6/2018	50	0	0	1,000
11/3/2018	50	0	0	500
7/17/2019	50	0	0	2,000
7/31/2019	50	0	0	5,000
TOTAL		0	0	307,500

Source: NOAA, National Climatic Data Center

Severe thunderstorms are a town-wide hazard for Needham. The town's vulnerability to severe thunderstorms is similar to that of nor'easters. High winds can cause falling trees and power outages, as well as obstruction of key routes and emergency access. Heavy precipitation may also cause localized flooding, both riverine and urban drainage related. According to the National Climatic Data Center database several of the thunderstorms had impacts in Needham. On July 29, 2014 a microburst downed trees and powerlines on Country Way and Moseley Avenue. On July 18, 2016 trees and wires were downed on Hoover Street. On July 31, 2019 a tree went down on a house on Greendale Avenue and a tree was downed on a utility pole on Oakcrest Road.

Based on the record of previous occurrences, severe thunderstorms in Needham are high frequency events as this hazard has occurred an average of three times per year in the past ten years. As noted previously, the intensity of rainfall events has increased significantly, and those trends are expected to continue. The SHMCAP does not specifically address whether climate will affect the intensity or frequency of thunderstorms.

ICE STORMS

The ice storm category covers a range of different weather phenomena that collectively involve rain or snow being converted to ice in the lower atmosphere leading to potentially hazardous

conditions on the ground. Hail size typically refers to the diameter of the hailstones. Warnings and reports may report hail size through comparisons with real-world objects that correspond to certain diameters:

Table 23: Hail Size Comparisons

Description	Diameter (inches)
Pea	0.25
Marble or mothball	0.50
Penny or dime	0.75
Nickel	0.88
Quarter	1.00
Half dollar	1.25
Walnut or ping pong ball	1.50
Golf ball	1.75
Hen's egg	2.00
Tennis ball	2.50
Baseball	2.75
Tea cup	3.00
Grapefruit	4.00
Softball	4.50

While ice pellets and sleet are examples of these, the greatest hazard is created by freezing rain conditions, which is rain that freezes on contact with hard surfaces leading to a layer of ice on roads, walkways, trees, and other surfaces. The conditions created by freezing rain can make driving particularly dangerous and emergency response more difficult. The weight of ice on tree branches can also lead to falling branches damaging electric lines.

Town-specific data for previous ice storm occurrences are not collected by the Town of Needham. The best available local data is for Norfolk County through the National Climatic Data Center. Norfolk County experienced twelve events from 2010 through 2019, for an average of 1.2 events per year. There is some indication that as winters warm, temperatures may be more likely to produce icing conditions. Indeed, town officials report that road icing conditions have been a problem in recent winters.

Table 24: Norfolk County Hail Events, 2010 through 2019

DATE	MAGNITUDE	DEATHS	INJURIES	PROPERTY DAMAGE
6/5/2010	1.5	0	0	0
6/20/2010	1	0	0	0
6/1/2011	0.75	0	0	0
6/23/2012	0.88	0	0	0
7/18/2012	0.75	0	0	0
5/21/2013	0.75	0	0	0
9/1/2013	0.75	0	0	0

8/7/2014	0.75	0	0	0
5/12/2015	0.75	0	0	0
6/23/2015	1	0	0	0
8/4/2015	1	0	0	0
6/30/2019	0.75	0	0	0
TOTAL		0	0	0

*Magnitude refers to diameter of hail stones in inches

Source: NOAA, National Climatic Data Center

NON-CLIMATE INFLUENCED HAZARDS

EARTHQUAKES

Earthquakes are the sole natural hazard for which there is no established correlation with climate impacts. Damage in an earthquake stems from ground motion, surface faulting, and ground failure in which weak or unstable soils, such as those composed primarily of saturated sand or silts, liquefy. The effects of an earthquake are mitigated by distance and ground materials between the epicenter and a given location. An earthquake in New England affects a much wider area than a similar earthquake in California due to New England's solid bedrock geology (NESEC).

Seismologists use a magnitude scale known as the Richter scale to express the seismic energy released by each earthquake. The typical effects of earthquakes in various ranges are summarized below:

Table 25: Richter Scale and Effects

Richter Magnitudes	Earthquake Effects
Less than 3.5	Generally, not felt, but recorded
3.5- 5.4	Often felt, but rarely causes damage
Under 6.0	At most slight damage to well-designed buildings. Can cause major damage to poorly constructed buildings over small regions.
6.1-6.9	Can be destructive in areas up to about 100 km. across where people live.
7.0- 7.9	Major earthquake. Can cause serious damage over larger areas.
8 or greater	Great earthquake. Can cause serious damage in areas several hundred meters across.

Source: Nevada Seismological Library (NSL), 2005

According to the State Hazard Mitigation Plan, New England experiences an average of five earthquakes per year. From 1668 to 2007, 355 earthquakes were recorded in Massachusetts (NESEC). Most have originated from the La Malbaie fault in Quebec or from the Cape Anne fault located off the coast of Rockport. The region has experienced larger earthquakes in the distant past, including a magnitude 5.0 earthquake in 1727 and a 6.0 earthquake that struck in 1755 off the coast of Cape Anne. More recently, a pair of damaging earthquakes occurred near Ossipee, NH in 1940. A 4.0 earthquake centered in Hollis, Maine in October 2012 was felt in the

Boston area. Historic records of some of the more significant earthquakes in the region are shown in Table 24.

Table 26: Historical Earthquakes in Massachusetts or Surrounding Area

Location	Date	Magnitude
MA - Cape Ann	11/10/1727	5
MA - Cape Ann	12/29/1727	NA
MA - Cape Ann	2/10/1728	NA
MA - Cape Ann	3/30/1729	NA
MA - Cape Ann	12/9/1729	NA
MA - Cape Ann	2/20/1730	NA
MA - Cape Ann	3/9/1730	NA
MA - Boston	6/24/1741	NA
MA - Cape Ann	6/14/1744	4.7
MA - Salem	7/1/1744	NA
MA - Off Cape Ann	11/18/1755	6
MA - Off Cape Cod	11/23/1755	NA
MA - Boston	3/12/1761	4.6
MA - Off Cape Cod	2/2/1766	NA
MA - Offshore	1/2/1785	5.4
MA - Wareham/Taunton	12/25/1800	NA
MA - Woburn	10/5/1817	4.3
MA - Marblehead	8/25/1846	4.3
MA - Brewster	8/8/1847	4.2
MA - Boxford	5/12/1880	NA
MA - Newbury	11/7/1907	NA
MA - Wareham	4/25/1924	NA
MA - Cape Ann	1/7/1925	4
MA - Nantucket	10/25/1965	NA
MA - Boston	12/27/74	2.3
MA - Nantucket	4/12/12	4.5
ME - Hollis	10/17/12	4.0

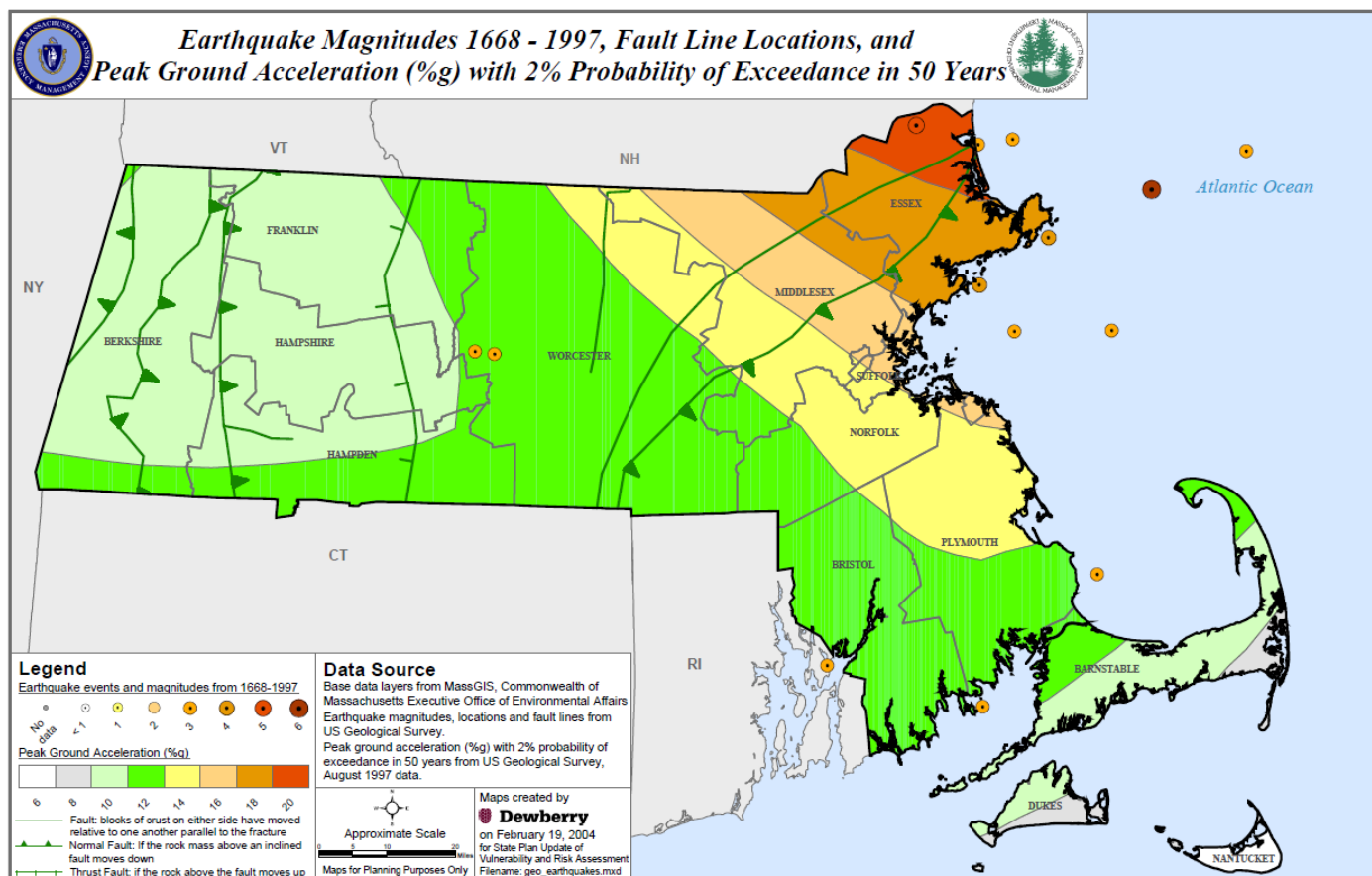
Source: Boston HIRA

One measure of earthquake risk is ground motion, which is measured as maximum peak horizontal acceleration, expressed as a percentage of gravity (%g). The range of peak ground acceleration in Massachusetts is from 10 %g to 20 %g, with a 2% probability of exceedance in 50 years. Needham is in the middle part of the range for Massachusetts, at 14 %g to 16 %g, making it a relatively moderate area of earthquake risk within the state, although the state as a whole is considered to have a low risk of earthquakes compared to the rest of the country. There have been no recorded earthquake epicenters within Needham.

Although New England has not experienced a damaging earthquake since 1755, seismologists state that a serious earthquake occurrence is possible. There are five seismological faults in

Massachusetts, but there is no discernible pattern of previous earthquakes along these fault lines. Earthquakes occur without warning and may be followed by aftershocks. The majority of older buildings and infrastructure were constructed without specific earthquake resistant design features.

Figure 13: State of Massachusetts Earthquake Probability Map



Earthquakes are a hazard with multiple impacts beyond the obvious building collapse. Buildings may suffer structural damage which may or may not be readily apparent. Earthquakes can cause major damage to roadways, making emergency response difficult. Water lines and gas lines can break, causing flooding and fires. Another potential vulnerability is equipment within structures. For example, a hospital may be structurally engineered to withstand an earthquake, but if the equipment inside the building is not properly secured, the operations at the hospital could be severely impacted during an earthquake. Earthquakes can also trigger landslides.

According to the SHMCAP there is a 10-15% chance of a magnitude 5 earthquake in a given ten-year period. Earthquakes are a potential town-wide hazard in Needham. Although new construction under the most recent building codes generally will be built to seismic standards, much of the development in the town pre-dates the most recent building code. Potential earthquake damages to Needham have been estimated using HAZUS-MH. Total building damages are

estimated at \$725.5 million for a 5.0 magnitude earthquake and \$6.3 billion for a 7.0 magnitude earthquake. Other potential impacts are detailed in Table 30.

LAND USE AND DEVELOPMENT TRENDS

Existing Land Use

The most recent land use statistics available from the state are from aerial imagery completed in 2016. Table 28 shows the acreage and percentage of land in 13 categories. If the primary residential categories are aggregated, residential uses make up 47.5% of the area of the town. Commercial and industrial uses combined make up 5.8% of the town. Agriculture, Open Land, and Recreation total 17.7% of the land. The tax-exempt category represents 16.5% of Needham's land. Most of this land is additional open space.

Table 27: Town of Needham, MA 2005 Land Use

Land Use Type	Acres	Percentage
Residential - single family	3496	42.9
Residential - multi-family	207	2.5
Mixed use, primarily residential	174	2.1
Mixed use, primarily commercial	0	0
Commercial	263	3.2
Mixed use, other	5	0.1
Industrial	214	2.6
Agriculture	35	0.4
Open land	1374	16.9
Recreation	30	0.4
Unknown	65	0.8
Right-of-way	937	11.5
Tax exempt	1342	16.5
Total	8142	100.0

For more information on how the land use statistics were developed and the definitions of the categories, please go to <https://docs.digital.mass.gov/dataset/massgis-data-land-use-2005>.

Economic Elements

Needham is primarily a suburban residential community. Many residents commute to Boston, which is easily accessible by public transportation. Needham does have several areas of concentrated economic activity. These include commercial and industrial areas located adjacent to Route 128. More development along Route 128 is anticipated in the next five years. Smaller scale commercial businesses are located along Highland Avenue and in close proximity to commuter rail. Not surprisingly, all of these locations are associated with the high heat areas mapped for Needham. Due to traffic congestion along Route 128, residents expressed concern about the need for monitoring evacuation plans and plan for handling hazardous waste.

NATURAL, CULTURAL, AND HISTORICAL RESOURCE AREAS

Needham has two historic districts, the McIntosh Corner and Town Hall Historic District. In addition, there are 18 buildings on the Massachusetts Register of Historic Places. Scenic roads in Needham include Charles River Street, South Street, and Central Avenue between Nehoidan Street and Marked Tree Road. Natural resources include Ridge Hill Reservation and Needham Town Forest. Cutler Park and Hemlock Gorge are DCR properties. The Charles River encircles Needham on three sides and Needham has many ponds, streams, and wetlands areas.

DEVELOPMENT TRENDS

Development trends throughout the metropolitan region are tracked by MassBuilds, MAPC's Development Database, which provides an inventory of new development over the last decade. The database tracks both completed developments and those currently under construction. The database includes seven completed projects in the Town of Needham since 2105

The database also includes several attributes of the new development, including housing units, and commercial space. The seven developments in Needham include a total of 656 housing units and over 700,000 square feet of commercial space.

Table 28: Summary of Needham Developments, 2015-2020

Name	Status	Year	Housing Units	Commercial Square Feet	Project Type
Needham Bank expansion	Complete	2015	0	12,363	Commercial
Wingate	Complete	2016	0	52 rooms	Commercial
Rockwood Estates	Complete	2017	9	0	Residential
Needham Mews	Complete	2018	266	0	Residential
Homewood Suites	Complete	2018	0	31,148	Commercial
Second Avenue Residences	Complete	2019	390	0	Residential
Center 128	Complete	2020	0	740,000	Commercial

POTENTIAL FUTURE DEVELOPMENT

MAPC consulted with the Local Hazard Mitigation Planning Team to determine areas that may be developed in the future, based on the Town's comprehensive planning efforts and current trends and projects. These areas are listed below with their flood and heat risk outlined in Table 27. In order to characterize any change in the town's vulnerability associated with new developments, a GIS mapping analysis was conducted which overlaid the development sites with the FEMA Flood Insurance Rate Map and the hottest 5% of land surface in the MAPC region. Potential future development projects:

- A) Boston Children's Hospital: Proposed expansion in Founder's Park. Three additional buildings totaling 450,000 square feet.

- B) Hotel: 156 B Street, 180 units and 96,010 square feet
- C) 390 Grove Street: two lot subdivision
- D) Heather Lane: proposed new subdivision for 6 house lots and 5 residential compound lots.
- E) 1180 Great Plain Avenue: 40-B proposal for 16 rental units

FUTURE DEVELOPMENT IN HAZARD AREAS

Table 27 shows the relationship between potential future development areas and the applicable mapped hazard areas (flood zones and heat). This information is provided so that planners can ensure that development proposals comply with floodplain zoning and that careful attention is paid to drainage, heat, and other issues.

Table 29: Relationship of Potential Development to Hazard Areas

Map ID	Potential Future Project	Flood Zones	High Heat
A	Boston Children's Hospital		75%
B	Hotel		100%
C	Grove Street Subdivision		
D	Heather Lane Subdivision	32% AE 16% X	
E	Great Plain Ave. 40B		

CRITICAL FACILITIES & INFRASTRUCTURE IN HAZARD AREAS

Critical facilities and infrastructure includes facilities that are important for disaster response and evacuation (such as emergency operations centers, fire stations, water pump stations, communications, and electricity) and facilities where additional assistance might be needed during an emergency (such as nursing homes, elderly housing, day care centers, etc.). There are 113 facilities identified in Needham. These are listed in Table 28 and are shown on the maps in Appendix B.

Explanation of Columns in Table 28

- **Column 1: ID #:** The first column in Table 28 is an ID number which appears on the maps that are part of this plan. See Appendix B.
- **Column 2: Name:** The second column is the name of the site.
- **Column 3: Type:** The third column indicates what type of site it is.
- **Column 4: FEMA Flood Zone:** The fourth column addresses the risk of flooding. A “No” entry in this column means that the site is not within any of the mapped risk zones on the Flood Insurance Rate Maps (FIRM maps). If there is an entry in this column, it indicates the type of flood zone. as follows:
Zone AE Zones AE is the flood insurance rate zone that corresponds to the 100-year floodplains that are determined in the FIS by detailed methods. Mandatory flood insurance purchase requirements apply.
- **Zone A** Areas subject to inundation by the 1-percent-annual-chance flood event. Because detailed hydraulic analyses have not been performed, no Base Flood Elevations (BFEs) or flood depths are shown. Mandatory flood insurance purchase requirements and floodplain management standards apply.
- **Zone AE** Areas subject to inundation by the 1-percent-annual-chance flood event determined by detailed methods. Base Flood Elevations (BFEs) are shown. Mandatory flood insurance purchase requirements and floodplain management standards apply.
- **Zone AH** Areas subject to inundation by 1-percent-annual-chance shallow flooding (usually areas of ponding) where average depths are 1–3 feet. BFEs derived from detailed hydraulic analyses are shown in this zone. Mandatory flood insurance purchase requirements and floodplain management standards apply.
- **Zone X (shaded)** Moderate risk areas within the 0.2-percent-annual-chance floodplain, areas of 1-percent-annual-chance flooding where average depths are less than 1 foot, areas of 1-percent-annual-chance flooding where the contributing drainage area is less than 1 square mile, and areas protected from the 1-percent-annual-chance flood by a levee. No BFEs or base flood depths are shown within these zones. (formerly Zone B)
- **Zone X (unshaded)** Minimal risk areas outside the 1-percent and .2-percent-annual-chance floodplains. No BFEs or base flood depths are shown within these zones. (formerly Zone C)
- **Column 5: Locally-Identified Area of Flooding:** The fifth column indicates the risk of flooding in local hazard areas. A “No” entry in this column means that the site is not within any of the mapped flood hazard zones. If there is an entry in this column, it indicates the local hazard area.
- **Column 6:** Hot spots indicates areas that are within the 5% of hottest areas in the MAPC region based on satellite data from 2016.
-

Table 30: Critical Facilities and Relationship to Hazard Areas

ID	NAME	TYPE	FEMA FLOOD ZONE	LOCAL ID FLOOD ZONE	HOT SPOT
1	Broadmeadow Elementary School	School	No	No	Yes
2	Eliot School	School	No	No	No
3	Hillside Elementary School	School	No	No	No
4	William Mitchell Elementary School	School	No	No	No

ID	NAME	TYPE	FEMA FLOOD ZONE	LOCAL ID FLOOD ZONE	HOT SPOT
5	Newman Elementary School	School	No	No	No
6	Pollard Middle School	School	No	No	Yes
7	Needham High School	School	No	No	Yes
10	Charles River Assn. for Retarded Citizen	Special Needs	No	No	No
12	St. Joseph Elementary/Middle School	School	No	No	Yes
13	St. Sebastian's High School	School	No	No	No
24	Needham High School Shelter	Shelter	No	No	Yes
31	Riverside Community Care	School	No	No	Yes
36	Walker Home School	School	No	No	No
38	Town Hall	Municipal	No	No	Yes
39	Avery Manor Nursing Home	Nursing Home	No	No	Yes
40	Briarwood Nursing Home	Nursing Home	No	No	No
41	North Hill Retirement Community	Nursing Home	No	No	Yes
43	Wingate Nursing Home	Nursing Home	No	No	No
44	Verizon Telephone Switch Bldg	Communication Tower	No	No	Yes
45	Coca-Cola Bottling Company	Hazardous Material Site	No	No	Yes
46	Verizon	Communication Tower	No	No	No
47	Level III	Hazardous Material Site	No	No	Yes
48	Algonquin Gas Meter Station	Gas Distribution	AH	No	No
50	Kerivan-Lane Petroleum	Hazardous Material Site	X	No	Yes
51	Comcast of Needham Inc.	Hazardous Material Site	No	No	Yes
52	Muzi Motors Inc.	Hazardous Material Site	No	No	Yes
57	Pollard Middle School-Shelter	Shelter	No	No	Yes
58	Emergency Management/Operations Center	Emergency Operations Center	No	No	Yes
59	Beth Israel Deaconess Hospital	Hospital	No	No	No
60	Needham Department of Public Works	Municipal	X	No	No
61	Media Transmission Towers	Communication Tower	No	No	Yes
62	Media Transmission Towers	Communication Tower	No	No	No
63	St. Mary Pump Station	Water Pump Station	No	No	No
65	Water Treatment Plant	Waste Water Treatment	No	Water Treatment Plant	No
66	Needham Fire Department Station#2	Fire Station	No	No	No
67	Needham Fire Dept.	Fire Station	No	No	Yes
68	Needham Police Dept.	Police Station	No	No	Yes
69	Needham Public Library	Municipal	No	No	No
70	Roche Brothers Supermarket	Grocery Store	No	No	No
71	Water Storage Tank Storage #2	Water Storage Tank	No	No	No
72	Water Storage Tank Storage #1	Water Storage Tank	No	No	No
74	Sudbury Farms Supermarket	Grocery Store	No	No	Yes

ID	NAME	TYPE	FEMA FLOOD ZONE	LOCAL ID FLOOD ZONE	HOT SPOT
76	Duke Energy NG Transmission Line PC	Gas Distribution	No	No	No
77	Carter Methodist Church	Church	No	No	No
78	Charles River Industry	Special Needs	No	No	No
79	U.S. Post Office	Post Office	No	No	No
80	U.S. Post Office	Post Office	No	No	Yes
81	St Joseph's Church	Church	No	No	Yes
83	First Baptist Church	Church	No	No	No
84	Presbyterian Church	Church	No	No	No
85	Council on Aging	Senior Services	No	No	Yes
86	Public Services Administration Building	Municipal	X	Edgewater Drive	No
87	Recycling and Transfer Station	Municipal	No	No	No
88	School Administration Building	School	No	No	Yes
89	Monsignor Haddad Middle School	School	No	No	Yes
90	Olin College of Engineering	School	No	No	No
91	YMCA Afterschool	School	No	No	No
92	Needham Community Council/Food Pantry	Social Service	No	No	No
93	Daley Building	Municipal	No	No	No
94	High Rock School	School	No	No	No
95	Sunita Williams School	School	No	Central Avenue at Rosemary Brook	No
96	Rosemary Recreation Complex	Back-up EOC	No	No	No
97	West Street Sewer Pump Station	Sewer Pump	A	West Street at Rosemary Brook	No
98	Dedham Avenue Water Pump Station	Water Station	X	Dedham Ave at DPW complex)	No
99	Avita Memory Care	Nursing Home	No	No	No
100	Wingate of Needham	Nursing Home	No	No	No
101	CareWell Urgent Care	Medical Facility	No	No	Yes
102	Otrada Adult Day Care	Senior Services	No	No	Yes
103	Trader Joe's	Grocery Store	No	No	Yes
104	Volante Farms	Grocery Store	No	No	No
105	First Parish in Needham	Church	No	No	Yes
106	Congregational Church	Church	No	No	No
107	Christ Episcopal Church	Church	No	No	No
108	First Church of Christ Scientist	Church	No	No	No
109	Greendale Ave Worship Center	Church	No	No	No

ID	NAME	TYPE	FEMA FLOOD ZONE	LOCAL ID FLOOD ZONE	HOT SPOT
110	Chestnut Street Animal Hospital	Animal Hospital	No	No	Yes
111	Highland Avenue Animal Hospital	Animal Hospital	No	No	No
112	Stanley Tippet House	Long Term Care	No	No	No
113	Needham Public Housing	Senior Housing	No	No	No
114	Needham Public Housing	Senior Housing	No	No	No
115	Needham Public Housing	Senior Housing	No	No	No
116	Verizon Telephone Switch Building	Hazardous Material Site	No	No	Yes
117	Microwave Development Labs Inc	Hazardous Material Site	No	No	Yes
118	AT&T - MA3438	Hazardous Material Site	AE	No	No
119	Beth Israel Deaconess Hospital	Hazardous Material Site	No	No	No
120	Charles River Water Treatment Facility	Hazardous Material Site	No	Water Treatment Plant (	No
121	Digital 105 Cabot, LLC	Hazardous Material Site	No	No	Yes
122	General Dynamics C4 Systems	Hazardous Material Site	No	No	Yes
123	Needham Nine Owners LLC	Hazardous Material Site	No	No	Yes
124	Needham Oil & Air	Hazardous Material Site	No	No	Yes
125	NSTAR Station 148 & 381	Hazardous Material Site	No	No	No
126	Olin College of Engineering	Hazardous Material Site	No	No	No
127	Recycle and Transfer Station	Hazardous Material Site	No	No	No
128	Celldex	Hazardous Material Site	No	No	Yes
129	Needham Heights	Train Stations	No	No	Yes
130	Needham Center	Train Stations	No	No	Yes
131	Needham Junction	Train Stations	No	No	No
132	Hersey	Train Stations	No	No	No
133	Eversource Electric Substation	Utility	No	No	No
134	Water Pump Station 3	Water Pump Station	No	No	No
135	Sheraton Needham Hotel	Hotel	No	No	Yes
136	Residence Inn by Marriott Boston Needham	Hotel	No	No	Yes
137	Hilton Homewood Suites	Hotel	No	No	Yes
139	Needham CO - LTPF9 (AT&T Services Inc)	Hazardous Material Site	No	No	Yes
139	WBZ Transmitter Site (American Tower)	Hazardous Material Site	No	No	No
140	Great Plain Pump Station	Sewer Pump Station	No	No	No
141	Alden Road Pump Station	Sewer Pump Station	No	No	No
142	Cook's Bridge	Sewer Pump Station	X	No	No
143	Reservoir B	Sewer Pump Station	AE	No	No
144	Reservoir A	Sewer Pump Station	No	No	No
145	Kendrick Street Pump Station	Sewer Pump Station	No	No	No
146	Warren Pump Station	Sewer Pump Station	No	No	No
147	Lake Drive Pump Station	Sewer Pump Station	No	No	No

VULNERABILITY ASSESSMENT

The purpose of the vulnerability assessment is to estimate the extent of potential damages from natural hazards of varying types and intensities. A vulnerability assessment and estimation of damages was performed for hurricanes, earthquakes, and flooding through the HAZUS-MH software.

Introduction to HAZUS-MH

HAZUS- MH (multiple-hazards) is a computer program developed by FEMA to estimate losses due to a variety of natural hazards. The following overview of HAZUS-MH is taken from the FEMA website. For more information on the HAZUS-MH software, go to <https://www.fema.gov/hazus/>

“HAZUS-MH is a nationally applicable standardized methodology and software program that contains models for estimating potential losses from earthquakes, floods, and hurricane winds. HAZUS-MH was developed by the Federal Emergency Management Agency (FEMA) under contract with the National Institute of Building Sciences (NIBS). Loss estimates produced by HAZUS-MH are based on current scientific and engineering knowledge of the effects of hurricane winds, floods and earthquakes. Estimating losses is essential to decision-making at all levels of government, providing a basis for developing and evaluating mitigation plans and policies as well as emergency preparedness, response and recovery planning.

HAZUS-MH uses state-of-the-art geographic information system (GIS) software to map and display hazard data and the results of damage and economic loss estimates for buildings and infrastructure. It also allows users to estimate the impacts of hurricane winds, floods and earthquakes on populations.”

There are three modules included with the HAZUS-MH software: hurricane wind, flooding, and earthquakes. There are also three levels at which HAZUS-MH can be run. Level 1 uses national baseline data and is the quickest way to begin the risk assessment process. The analysis that follows was completed using Level 1 data. Level 1 relies upon default data on building types, utilities, transportation, etc. from national databases as well as census data. While the databases include a wealth of information on the Town of Needham, it does not capture all relevant information. In fact, the HAZUS training manual notes that the default data is “subject to a great deal of uncertainty.”

However, for the purposes of this plan, the analysis is useful. This plan is attempting to generally indicate the possible extent of damages due to certain types of natural disasters and to allow for a comparison between different types of disasters. Therefore, this analysis should be considered to be a starting point for understanding potential damages from the hazards.

ESTIMATED DAMAGES FROM HURRICANES

The HAZUS software was used to model potential damages to the community from a 100-year and 500-year hurricane event; storms that are 1% and 0.2% likely to happen in a given year, and roughly equivalent to a Category 2 and Category 4 hurricane. The damages caused by these hypothetical storms were modeled as if the storm track passed directly through the town, bringing the strongest winds and greatest damage potential.

Though there are no recorded instances of a hurricane equivalent to a 500-year storm passing through Massachusetts, this model was included in order to present a reasonable “worst case scenario” that would help planners and emergency personnel evaluate the impacts of storms that might be more likely in the future, as we enter into a period of more intense and frequent storms.

Table 31: Estimated Damages from Hurricanes

	Category 2	Category 4
Building Characteristics		
Estimated total number of buildings	10,974	
Estimated total building replacement value (2014 \$)	\$6,181,000,000	
Building Damages		
# of buildings sustaining minor damage	406	2,000
# of buildings sustaining moderate damage	29	350
# of buildings sustaining severe damage	1	21
# of buildings destroyed	0	11
Population Needs		
# of households displaced	0	9
# of people seeking public shelter	0	5
Debris		
Building debris generated (tons)	1,381	6,898
Tree debris generated (tons)	3,943	9,892
# of truckloads to clear building debris	55	276
Value of Damages		
Total property damage (buildings and content)	\$34,835,950	\$129,607,190
Total losses due to business interruption	\$1,063,630	\$8,700,670

ESTIMATED DAMAGES FROM EARTHQUAKES

The HAZUS earthquake module allows users to define an earthquake magnitude and model the potential damages caused by that earthquake as if its epicenter had been at the geographic

center of the study area. For the purposes of this plan, two earthquakes were selected: magnitude 5.0 and a magnitude 7.0. Historically, major earthquakes are rare in New England, though a magnitude 5 event occurred in 1963.

Table 32: Estimated Damages from Earthquakes

	Magnitude 5.0	Magnitude 7.0
Building Characteristics		
Estimated total number of buildings	10,974	
Estimated total building replacement value (2014 \$)	\$6,181,000,000	
Building Damages		
# of buildings sustaining slight damage	3,211	295
# of buildings sustaining moderate damage	1,741	2,117
# of buildings sustaining extensive damage	485	3,099
# of buildings completely damaged	126	5,433
Population Needs		
# of households displaced	281	5,440
# of people seeking public shelter	151	2,893
Debris		
Building debris generated (tons)	130,000	1,040,000
# of truckloads to clear debris (@ 25 tons/truck)	5,520	41,640
Value of Damages		
Total property damage	\$725,541,900	5,526,238,600
Total losses due to business interruption	\$151,616,900	\$806,267,800

ESTIMATED DAMAGES FROM FLOODING

The HAZUS flooding module allows users model the potential damages caused by a 100-year flood event and a 500-year flood event.

Table 33: Estimated Damages from Flooding

	100-Year Flood	500-Year Flood
Building Characteristics		
Estimated total number of buildings	10,974	
Estimated total building replacement value (2014 \$)	\$6,181,000,000	
Building Damages		
# of buildings sustaining limited damage	50	39

# of buildings sustaining moderate damage	23	51
# of buildings sustaining extensive damage	3	1
# of buildings substantially damaged	4	5
Population Needs		
# of households displaced	349	398
# of people seeking public shelter	115	18
Value of Damages		
Total property damage	\$26,730,000	\$36,220,000
Total losses due to business interruption	\$14,390,000	\$53,690,000

SECTION 5: HAZARD MITIGATION GOALS

The Needham Local Hazard Mitigation Planning Team reviewed and discussed the goals from the 2009 Hazard Mitigation Plan for the Town of Needham. All of the goals are considered critical for the Town and they are not listed in order of importance. Prior to the Hazard Mitigation Plan update process, the Town of Needham developed a Climate Change Vulnerability Analysis and Action Plan. The local team chose to incorporate climate considerations as noted in Goal 11.

- GOAL 1:** Ensure that critical infrastructure sites are protected from natural hazards.
- GOAL 2:** Protect existing residential and business areas from flooding
- GOAL 3:** Maintain existing mitigation infrastructure in good condition.
- GOAL 4:** Continue to enforce existing zoning and building regulations.
- GOAL 5:** Educate the public about zoning and building regulations.
- GOAL 6:** Work with surrounding communities to ensure regional cooperation and solutions for hazards affecting multiple communities.
- GOAL 7:** Encourage future development and redevelopment in areas that are not prone to natural hazards.
- GOAL 8:** Educate the public about natural hazards and mitigation measures.
- GOAL 9:** Make efficient use of public funds for hazard mitigation.
- GOAL 10:** Pursue land acquisition strategies.
- GOAL 11:** Consider the potential impacts of future climate change. Incorporate climate sustainability and resiliency in hazard mitigation planning.

SECTION 6: EXISTING MITIGATION MEASURES

The existing protections in the Town of Needham are a combination of zoning, land use, and environmental regulations, infrastructure maintenance, and drainage infrastructure improvement projects. Infrastructure maintenance generally addresses localized drainage clogging problems, while large scale capacity problems may require pipe replacement or invert elevation modifications. These more expensive projects are subject to the capital budget process and lack of funding is one of the biggest obstacles to completion of some of these. Needham's adoption of a stormwater utility will contribute significantly to efforts to address stormwater flooding.

The Town's existing mitigation measures, which were in place prior to the original 2005 Plan, are listed by hazard type here and are summarized in Table 32 below. Many upgrades to existing measures are noted in the following sections.

EXISTING MULTI-HAZARD MITIGATION MEASURES

Multi-Department Review of Developments – Multiple departments, such as Planning, Zoning, Health, Public Works, Fire, Police, and Conservation review all subdivisions and site plans prior to approval.

Comprehensive Emergency Management Plan (CEMP) – Every community in Massachusetts is required to have a Comprehensive Emergency Management Plan. These plans address mitigation, preparedness, response, and recovery from a variety of natural and man-made emergencies. These plans contain important information regarding flooding, dam failures and winter storms. Therefore, the CEMP is a mitigation measure that is relevant to many of the hazards discussed in this plan. The CEMP is available online through secure access for town personnel.

Enforcement of the State Building Code – The Massachusetts State Building Code contains many detailed regulations regarding wind loads, earthquake resistant design, flood-proofing, and snow loads.

Local Emergency Management Planning Committee (LEPC) – The LEPC consists of representatives from Public Works, Fire, Police, Health, School, Town Manager, Transportation, Board of Selectmen, Emergency Management, and local businesses.

Emergency Preparedness public education is available on the town's website.

The town has a reverse 911 system and names can be added to the database via the town's website.

The Needham High School is the designated community shelter site.

The town has a Citizen Emergency Response Team (CERT) that provides training, supplies, and public education to neighborhoods.

The town also has a volunteer Medical Reserve Corps, that could be activated in times of emergency to provide medical care/vaccinations to large numbers of people.

The town works with the Council on Aging to help provide shelter to the elderly during extreme heat.

EXISTING TOWN-WIDE MITIGATION FOR FLOOD-RELATED HAZARDS

Needham employs a number of practices to help minimize potential flooding and impacts from flooding, and to maintain existing drainage infrastructure. Existing town-wide mitigation measures include the following:

Participation in the National Flood Insurance Program (NFIP) – Needham participates in the NFIP with 240 policies in force as of the August 30, 2019. FEMA maintains a database on flood insurance policies and claims. This database can be found on the FEMA website at <https://www.fema.gov/policy-claim-statistics-flood-insurance>.

The following information is provided for the Town of Needham:

Flood insurance policies in force (September 30, 2018)	149
Coverage amount of flood insurance policies	\$44,782,100
Premiums paid	\$296,268
Closed losses (losses that have been paid)	102
Substantial Damage Claims since 1978	7
Total payments (total amount paid on losses)	\$1,363,146

The Town complies with the NFIP by enforcing floodplain regulations, maintaining up-to-date floodplain maps, and providing information to property owners and builders regarding floodplains and building requirements.

Engineering staff developing a Drainage System Inventory and integrating the data into the Town's Geographical Information System (GIS).

Catch basins on public roads and property are cleaned annually. Street sweeping also occurs on an annual basis.

The Public Works Department provides maintenance to culverts, drainage pipes, and other drainage infrastructure on an as-needed basis. Drainage maintenance activities are coordinated with the state Department of Environmental Protection and Massachusetts Water Resources Authority.

The Town mitigates for beavers on a case-by-case basis. The town will use a trapper as necessary if there is an immediate threat and is a public health issue. A permit to do so is required by state law through the local Board of Health. In some instances, pond levels will be lowered in anticipation of potential flooding.

Needham's Zoning has a Flood Plain Protection District that restricts certain activities and requires a special permit for activities located within a flood zone.

Needham's Zoning has a Wetlands Protection Regulation, intended to protect wetland resource areas, and minimize flooding.

The Massachusetts Stormwater Policy is applied to developments within the jurisdiction of the Conservation Commission.

The Town's subdivision regulations have general language about avoiding impacts to flood plains and minimizing drainage issues. Peak flows and runoff from the property cannot be greater than pre-development rates. Drainage requirements for Site Plans are also general and require post-development rates to meet pre-development runoff rates.

Open Space Residential Developments are allowed under Needham's Zoning.

The Town's Zoning also has an Aquifer Protection District to protect its drinking water supplies.

Needham has substantial protected open space and proactive land acquisition and preservation programs, including:

- The town's draft Open Space Plan and Community Preservation Plan are comprehensive and identify key parcels for purchase or protection.
- Low-lying wetland areas provide significant flood storage for the town's rivers.
- Flood plain has been preserved and is effective at minimizing flooding.

The town continues to implement its NPDES Phase II stormwater program which includes public education programs.

EXISTING DAM FAILURE MITIGATION MEASURES

DCR dam safety regulations – All dams are subject to the Division of Conservation and Recreation's dam safety regulations. The dams must be inspected regularly, and reports filed with the DCR Office of Dam Safety.

Permits required for construction – State law requires a permit for the construction of any dam.

EXISTING TOWN-WIDE MITIGATION FOR WIND-RELATED HAZARDS

The Public Works Department has an effective tree trimming in public areas and along Rights-of-Ways. They have a multi-year plan trimming program (approximately a 3-year cycle) to go over their whole system.

New developments must install buried utilities.

EXISTING TOWN-WIDE MITIGATION FOR WINTER-RELATED HAZARDS

The Public Works Department provides standard snow plowing operations, including salting and sanding, but with a restricted salt policy.

Overnight parking bans are in effect year-round.

Public Education - Winter Maintenance information is available on the town website

The town has a Snow and Ice Disposal bylaw that states no person shall put any snow or ice in any public place or upon any part of a public street or sidewalk.

The Town provides public education to residents regarding roof collapses due to snow when conditions are dangerous. In addition, new codes are more stringent to better guard against roof collapses.

The town has sufficient snow storage .

EXISTING TOWN-WIDE MITIGATION FOR FIRE-RELATED HAZARDS

Town bylaws allow controlled open burning in accordance with state regulations, but a permit is required from the Fire Chief for each day of intended burning.

The Fire department reviews all subdivision and site plans for compliance with site access, water supply needs, and all other applicable regulations.

The Fire Department is trained and has experience in protecting the open lands in town, as well as wooded areas associated with Olin College or other private institutions.

The town provides public education and notices during “drought watches.”

EXISTING TOWN-WIDE MITIGATION FOR EARTHQUAKE HAZARDS

The town has shelters and backup facilities.

The Needham Water Department is proactive in being able to isolate portions of the water system and identify alternative firefighting water supply sources.

The town does have an evacuation plan as specified in its Comprehensive Emergency Management Plan (CEMP).

EXISTING TOWN-WIDE MITIGATION FOR LANDSLIDE HAZARDS

The subdivision regulations do have maximum slope requirements for new roads.

The town has an earth removal bylaw.

COMPILATION OF EXISTING MITIGATION

Table 32 summarizes the many existing natural hazard mitigation measures already in place in Needham when the first Hazard Mitigation Plan was developed in 2009. Because of the number of entities, public and private, involved in natural hazard mitigation, it is likely that this list is a starting point for a more comprehensive inventory of all measures.

Table 34: Existing Natural Hazard Mitigation Measures in Needham

Type of Existing Mitigation Measures	Effectiveness	Improvements/ Changes Needed
MULTIPLE HAZARDS		
Multi-department review of developments	Yes	
Comprehensive Emergency Management Plan (CEMP)	Yes	
Enforcement of State Building Code	Yes	
Local Emergency Planning Committee (LEPC)	Yes	
Emergency Preparedness public education on the town website	Yes	Expanded to social media
Reverse 911	Yes	
Needham High is community shelter	Yes	Back-up sites as well
Citizen Emergency Response Team	Yes	CERT and MRC are combined
Medical Reserve Corps	Yes	
Sheltering for elderly during extreme heat	Yes	Shelter available to all

FLOOD HAZARDS		
Participation in the National Flood Insurance Program	Yes	
Stormwater system mapped in GIS	Yes	
Annual catch basin cleaning and annual street sweeping	Yes	
Drainage system maintenance is performed as needed, and under a general maintenance permit issued by the Conservation Commission	Yes	
Long-term stormwater plan and funding, and ongoing system improvements	Yes	
Beaver mitigation	Yes	
Flood Plain Conservancy District	Yes	
Wetlands Protection Bylaw and Regulations	Yes	
Massachusetts Stormwater Policy	Yes	
Stormwater Requirements in Subdivision Regulations and Site Plan Review	Yes	
Open Space Residential Developments allowed	Yes	
Aquifer Protection Overlay District	Yes	
Protected open space and proactive land preservation programs	Yes	
Public Education on stormwater through the NPDES Phase II program	Yes	
WIND HAZARDS		
DPW tree maintenance program	Yes	
Requirement for new developments to install underground utilities	Yes	
WINTER HAZARDS		
Overnight parking ban year-round.	Yes	
Standard snow operations, restricted salt	Yes	
Public Education on snow operations and winter maintenance is planned for town website	Yes	
Snow and Ice Removal Bylaw	Yes	
Sufficient space for municipal snow storage	Yes	
GEOLOGIC HAZARDS (EARTHQUAKE AND LANDSLIDE)		
Evacuation plan in CEMP	Yes	
Shelters and backup facilities available	Yes	
Water Department able to isolate portion of the water system and identify alternate firefighting supply sources	Yes	
Maximum slopes for subdivision roads	Yes	
Earth Removal Bylaw in the Aquifer Protection District	Yes	
FIRE HAZARDS		
Open Burn Permits Required	Yes	

Fire Department Development Review	Yes	
Fire Department provides public education on its website	Yes	Expanded to social media
Fire Department is trained for protecting open space	Yes	
Town provides public education on drought watches	Not currently	
DAMS		
DCR Dam Safety Regulations	Yes	
Construction permits required	Yes	

MITIGATION CAPABILITIES AND LOCAL CAPACITY FOR IMPLEMENTATION

Under the Massachusetts system of “Home Rule,” the Town of Needham is authorized to adopt and from time to time amend local bylaws and regulations that support the town’s capabilities to mitigate natural hazards. These include Zoning Bylaws, Subdivision and Site Plan Review Regulations, Wetlands Bylaws, Health Regulations, Public Works regulations, and local enforcement of the State Building Code. Local Bylaws may be amended by the Select Board to improve the town’s capabilities, and changes to most regulations simply require a public hearing and a vote of the authorized board or commission.

The Town of Needham has recognized several existing mitigation measures that require implementation or improvements and has the capacity within its local boards and departments to address these.

SECTION 7: MITIGATION MEASURES FROM PREVIOUS PLAN

IMPLEMENTATION PROGRESS ON THE PREVIOUS PLAN

At a meeting of the Needham Hazard Mitigation Planning Committee, Town staff reviewed the mitigation measures identified in the 2009 Needham Hazard Mitigation Plan and determined whether each measure had been implemented or deferred. Of those measures that had been deferred, the committee evaluated whether the measure should be deleted or carried forward into this Hazard Mitigation Plan 2020 Update. The decision on whether to delete or retain a particular measure was based on the committee's assessment of the continued relevance or effectiveness of the measure and whether the deferral of action on the measure was due to the inability of the Town to take action on the measure. Table 33 summarizes the status of mitigation measures from the 2009 plan.

Table 35: Mitigation Measures from the 2009 Plan

Mitigation Action	Priority in 2012 plan	Current Status	Include in 2020 plan?
Upgrade existing sewer/storm water drainage systems in affected areas	High	Considerable work has done to reduce infiltration. The town is now moving focus to inflow. In the interim, bypass protocols are in place.	Yes
Establish ability to have a portable generator for the town	High	2 large portable generators were purchased, the new Police and Fire building will have generators installed. Several sewer pumps have generators (as well as capacity to bypass in case of malfunction). Still need a permanent generator for the Senior Center, and sewer pump stations as they are upgraded.	Yes
Upgrades to culvert and drainage on Hunnewell Street	High	The town was not able to proceed with the project because it was unable to get needed easements from residents.	Yes
Build a Control Structure and Weir at Walker Pond	Medium	This project is complete although ongoing maintenance is needed.	No
Maintenance and Monitoring of Main Bridges	Medium	Maintenance and monitoring is a required and ongoing activity. Many of the bridges have been rebuilt or upgraded. The Central Avenue bridge to Dover is in need of evaluation and work.	Yes
Update Hazardous	Medium	The plan has been revised and updated.	No

Mitigation Action	Priority in 2012 plan	Current Status	Include in 2020 plan?
Materials Response Plan			
Assessment of Historic Structure Natural Hazard Vulnerability	Medium	This was not completed. It is not currently a town priority.	No
Identify Potential back-up sites for Emergency Operations	Medium	This task is complete.	No
Continuation of Open Space Protection and Land Acquisition	Not rated	This is an ongoing priority. The town makes \$1.5 million available each year as a placeholder should priority property become available for purchase.	Yes
Regulatory Revisions for Stormwater Management	Not rated	The town has a residential stormwater bylaw and follows federal NPDES requirements. The next step is to develop regulations for the bylaw. Town bylaw requires dry wells to capture roof and driveway runoff. The Planning Board supports Low Impact Development.	Yes
Maintenance of Existing Infrastructure	Not rated	This is complete. The town has a comprehensive stormwater maintenance plan. This is a federal requirement under NPDES.	No
Assessment of Municipal Structures for Susceptibly to Snow Loads	Low	This is not complete. The town shovels building with flat roofs as needed. This is not a current concern.	No

As indicated in Table 33, Needham made good progress implementing mitigation measures identified in the 2009 Hazard Mitigation Plan. Considerable work has been done to address sewer infiltration. The Town developed a comprehensive stormwater maintenance plan and adopted a new stormwater bylaw. Also completed was a hazardous materials management plan. Back up emergency operation are in place; open space purchases have been completed. Generators were purchase and the weir and control structure at Walker Pond were completed.

Several projects that were not completed will be continued into this plan update. While much work was done on area bridges, the Central Avenue bridge needs to be assessed and additional generators are needed in a few key locations. There are a number of measures for which the

Town does regular or periodic work, but they remain ongoing priorities. These include open space purchases and managing sewer infiltration and inflow.

Overall, six mitigation measures from the 2009 plan will be continued in the plan update. Most retain the same priority in this 2020 Update. Moving forward into the next five year plan implementation period there will be many more opportunities to incorporate hazard mitigation into the Town's decision-making processes. The challenges the Town faces in implementing these measures are primarily due to limited funding and available staff time. This plan should help the Town prioritize the best use of its limited resources for enhanced mitigation of natural hazards.

SECTION 8: HAZARD MITIGATION STRATEGY

WHAT IS HAZARD MITIGATION?

Hazard mitigation means to permanently reduce or alleviate the losses of life, injuries and property resulting from natural hazards through long-term strategies. These long-term strategies include planning, policy changes, education programs, infrastructure projects and other activities. FEMA currently has three mitigation grant programs: the Hazards Mitigation Grant Program (HGMP), the Pre-Disaster Mitigation program (PDM), and the Flood Mitigation Assistance (FMA) program. The three links below provide additional information on these programs.

<https://www.fema.gov/hazard-mitigation-grant-program>

<https://www.fema.gov/pre-disaster-mitigation-grant-program>

<https://www.fema.gov/flood-mitigation-assistance-grant-program>

Hazard Mitigation Measures can generally be sorted into the following groups:

- **Prevention:** Government administrative or regulatory actions or processes that influence the way land and buildings are developed and built. These actions also include public activities to reduce hazard losses. Examples include planning and zoning, building codes, capital improvement programs, open space preservation, and stormwater management regulations.
- **Property Protection:** Actions that involve the modification of existing buildings or infrastructure to protect them from a hazard or removal from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, flood proofing, storm shutters, and shatter resistant glass.
- **Public Education & Awareness:** Actions to inform and educate citizens, elected officials, and property owners about the potential risks from hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and school-age and adult education programs.
- **Natural Resource Protection:** Actions that, in addition to minimizing hazard losses also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- **Structural Projects:** Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include storm water controls (e.g., culverts), floodwalls, seawalls, retaining walls, and safe rooms.
- **Emergency Services Protection:** Actions that will protect emergency services before, during, and immediately after an occurrence. Examples of these actions include protection of warning system capability, protection of critical facilities, and protection of emergency response infrastructure.

(Source: FEMA Local Multi-Hazard Mitigation Planning Guidance)

REGIONAL AND INTER-COMMUNITY CONSIDERATIONS

Some hazard mitigation issues are strictly local. The problem originates primarily within the municipality and can be solved at the municipal level. Other issues are inter-community and require cooperation between two or more municipalities. There is a third level of mitigation which is regional and may involve a state, regional or federal agency or three or more municipalities.

REGIONAL PARTNERS

In developed urban and suburban communities such as the metropolitan Boston area, mitigating natural hazards, particularly flooding, is more than a local issue. The drainage systems that serve these communities are complex systems of storm drains, roadway drainage structures, pump stations and other facilities owned and operated by a wide array of agencies including the Town, the Department of Conservation and Recreation (DCR), the Massachusetts Water Resources Authority (MWRA), Massachusetts Department of Transportation (MassDOT) and the Massachusetts Bay Transportation Authority (MBTA). The planning, construction, operation and maintenance of these structures are integral to the flood hazard mitigation efforts of communities. These agencies must be considered the communities' regional partners in hazard mitigation. These agencies also operate under the same constraints as communities do including budgetary and staffing constraints and they must make decisions about numerous competing priorities.

Following, is a brief overview of regional facilities found in Needham and a discussion of inter-municipal issues.

OVERVIEW OF REGIONAL FACILITIES WITHIN NEEDHAM

Major facilities owned, operated and maintained by state or regional entities include:

- State Routes 128 and 135 (MassDOT)
- MBTA Needham Commuter Rail Line (MBTA)
- Cutler Park and Hemlock Gorge (Mass DCR)
- Charles River Natural Valley Storage Area – includes land in Needham owned by the Army Corps of Engineers for flood control purposes

INTER-COMMUNITY CONSIDERATIONS

Mitigation measures for the following regional issues should be taken into account as Needham develops its own local plan:

A) Coordinate and Review Developments on a Regional Basis

As Needham and the surrounding communities are undergoing development, it is vital that these communities communicate and provide input during the review processes. When addressing housing, transportation, and economic development projects, the impacts to neighbors must be addressed.

B) Charles River Watershed

Needham and the cities and towns within the Charles River watershed participate in an extensive, on-going effort to improve water quality in the Charles River.

NEW DEVELOPMENT AND INFRASTRUCTURE

As part of the process of developing recommendations for new mitigation measures for this plan update, the Town considered the issues related to new development, redevelopment, and infrastructure needs in order limit future risks. Taking into consideration the Wetlands Act and bylaw enforced by the Conservation Commission and the recent adoption of a Stormwater Bylaw, the town determined that existing regulatory measures are taking good advantage of local Home Rule land use regulatory authority to minimize natural hazard impacts of development. Priorities for the future include adoption of stormwater regulations.

PROCESS FOR SETTING PRIORITIES FOR MITIGATION MEASURES

The last step in developing the Town's mitigation strategy is to assign a level of priority to each mitigation measure so as to guide the focus of the Town's limited resources towards those actions with the greatest potential benefit. At this stage in the process, the Local Hazard Mitigation Planning Team had limited access to detailed analyses of the cost and benefits of any given mitigation measure, so prioritization is based on the local team members' understanding of existing and potential hazard impacts and an approximate sense of the costs associated with pursuing any given mitigation measure.

Priority setting was based on local knowledge of the hazard areas, including impacts of hazard events, the extent of the area impacted, and the relation of a given mitigation measure to the Town's goals. In addition, the local Hazard Mitigation Planning Team also took into consideration factors such as the number of homes and businesses affected, whether or not road closures occurred and what impact closures had on delivery of emergency services and the local economy, anticipated project costs, whether any environmental constraints existed, and whether the Town would be able to justify the costs relative to the anticipated benefits.

Table 34 below demonstrates the prioritization of the Town's potential hazard mitigation measures. For each mitigation measure, the geographic extent of the potential benefiting area is identified as is an estimate of the overall benefit and cost of the measures. The benefits, costs, and overall priority were evaluated in terms of:

Estimated Benefits	
High	Action will result in a significant reduction of hazard risk to people and/or property from a hazard event
Medium	Action will likely result in a moderate reduction of hazard risk to people and/or property from a hazard event
Low	Action will result in a low reduction of hazard risk to people and/or property from a hazard event

Estimated Costs	
High	Estimated costs greater than \$100,000
Medium	Estimated costs between \$10,000 to \$100,000
Low	Estimated costs less than \$10,000 and/or staff time
Priority	
High	Action very likely to have political and public support and necessary maintenance can occur following the project, and the costs seem reasonable considering likely benefits from the measure
Medium	Action may have political and public support and necessary maintenance has potential to occur following the project
Low	Not clear if action has political and public support and not certain that necessary maintenance can occur following the project

INTRODUCTION TO MITIGATION MEASURES TABLE

Description of the Mitigation Measure – The description of each mitigation measure is brief and cost information is given only if cost data were already available from the community. The cost data represent a point in time and would need to be adjusted for inflation and for any changes or refinements in the design of a particular mitigation measure.

Priority – As described above and summarized in Table 35, the designation of high, medium, or low priority was done considering potential benefits and estimated project costs, as well as other factors in the STAPLEE (Social, Technical, Administrative, Legal, Economic, and Environmental) analysis.

Implementation Responsibility – The designation of implementation responsibility was done based on a general knowledge of what each municipal department is responsible for. It is likely that most mitigation measures will require that several departments work together and assigning staff is the sole responsibility of the governing body of each community.

Time Frame – The time frame was based on a combination of the priority for that measure, the complexity of the measure and whether or not the measure is conceptual, in design, or already designed and awaiting funding. Because the time frame for this plan is five years, the timing for all mitigation measures has been kept within this framework. The identification of a likely time frame is not meant to constrain a community from taking advantage of funding opportunities as they arise.

Potential Funding Sources – This column attempts to identify the most likely sources of funding for a specific measure. The information on potential funding sources in this table is preliminary and varies depending on a number of factors. These factors include whether or not a mitigation measure has been studied, evaluated, or designed, or if it is still in the conceptual stages. MEMA and DCR assisted MAPC in reviewing the potential eligibility for hazard mitigation funding. Each grant program and agency has specific eligibility requirements that would need to be taken into

consideration. In most instances, the measure will require a number of different funding sources. Identification of a potential funding source in this table does not guarantee that a project will be eligible for, or selected for, funding. Upon adoption of this plan, the local team responsible for its implementation should begin to explore the funding sources in more detail.

Additional information on funding sources – The best way to determine eligibility for a particular funding source is to review the project with a staff person at the funding agency. The following websites provide an overview of programs and funding sources.

Army Corps of Engineers (ACOE) – The website for the North Atlantic district office is <http://www.nae.usace.army.mil/>. The ACOE provides assistance in a number of types of projects including shoreline/streambank protection, flood damage reduction, flood plain management services and planning services.

Massachusetts Emergency Management Agency (MEMA) – The grants page <https://www.mass.gov/hazard-mitigation-assistance-grant-programs> describes the various Hazard Mitigation Assistance Program.

Table 36: Mitigation Measures Prioritization

Climate Change	ACTION	GEOGRAPHIC COVERAGE	LEAD	TIME FRAME	EST. BENEFIT	EST. COST	FUNDING SOURCE	PRIORITY
Changes in Precipitation 	Inland Flooding							
	Address sewer inflow	Site-specific	Public Works	2022	High	High	Dept	High
	Upgrade culvert and drainage at Hunnewell Street	Site-specific	Public Works	2025	High	High	TM	Medium
	Monitor the condition of the Central Avenue bridge to Dover	Site-specific	Public Works	2021	Medium	High	Dept	Low
	Develop regulations for the recently adopted Stormwater Bylaw	Town-wide	Public Works Conservation	2021	High	Low	Depts	Medium
	Continue Open Space Protection and Land Acquisition	Site-specific	Conservation	2025	Medium	High	CPA, TM	Medium
	Analyze flood risks of a 500-year storm to the Charles River well heads.	Site-specific	Public Works	2023	High	High	TM	High
	Drought							
	Promote drought tolerant landscaping/site design	Town wide	Planning Conservation	2021	High	Low	Dept	Medium
	Implement drought tolerant landscaping on town properties	Site-specific	PPBC Public Works	2021	High	Low	Dept	Medium
	Advance permaculture to improve water quality and quantity	Site-specific	Public Works Conservation	2021	High	Medium	Depts	Medium
	Landslide							
	Identify areas of potential landslide risk	Town-wide	Public Works	2025	Low	Low	Dept	Low
Rising Temperatures 	Extreme Heat and Heat Waves							
	Purchase a generator for the library	Site-specific	Bldg. Maint.	2024	Low	High	Grant, Capital	Medium
	Investigate the feasibility of solar canopies at town sites.	Site-specific	Bldg. Const.	2021	High	Low	Dept	High
	Develop a tree removal mitigation program	Town-wide	Planning	2022	Medium	Low	Dept	Medium

	ACTION	GEOGRAPHIC COVERAGE	LEAD	TIME FRAME	EST. BENEFIT	EST. COST	FUNDING SOURCE	PRIORITY
	Wildfires							
	Provide public education on fire risk	Town-wide	Fire	2021	High	Low	Dept	High
	Map forest access roads. Maintain adequate access.	Site-specific	Public Works	2022	High	Medium	Dept	Medium
	Invasive species							
	Develop forestry management plan for treatment plant property	Site-specific	Public Works	2024	Medium High	High	Capital	Medium
Extreme Weather 	Hurricanes and Tropical storms (see Multihazards)							
	Severe Winter Storm/Nor'easter							
	Develop brining capacity	Town-wide	Public Works	2022	High	Medium	Capital	Medium
	Tornadoes (see Multihazards)							
	Other Severe weather (wind, thunderstorms) (see Multihazards)							
Multihazards	Multihazards							
	Address generator needs	Site-specific	Public Works	2024	High	High	Capital	Medium
Non-Climate Hazard	Earthquake							
	Assess retrofit or replacement costs of older town buildings	Site-specific	Public Works	2025	Low	Low	Dept	Low

DESCRIPTION OF MITIGATION MEASURES

Changes in Precipitation

Inland Flooding

Address sewer inflow: Considerable work has done to reduce infiltration. While that work continues, the Town is now moving focus to inflow. In the interim, bypass protocols are in place. Locations of focus include Warren and Grant Streets, and the Oak Street area.

Upgrade to Culvert and Drainage at Hunnewell Street: The Town completed plans for the project but was not able to proceed with the project because it was unable to obtain needed easements from residents. Moving forward with this project will most likely require revisiting the issue of easements.

Monitor the condition of the Central Avenue bridge to Dover: This would need to be a joint project with the Town of Dover. The approach to the bridge, the narrow passage, and the wooden railings are all safety concerns. The Town has secured funding to monitor shifting of stones in the bridge to assess the urgency of action.

Develop regulations for the recently adopted Stormwater Bylaw: The Town developed draft regulations. The next step will be to make revisions in response to the feedback received.

Continue Open Space Protection and Land Acquisition: This is an ongoing priority. The Town makes \$1.5 million available each year as a placeholder should priority property become available for purchase

Analyze flood risks of a 500-year storm to the Charles River well heads: Flooding in 1987 was problematic. Sand bagging has been required in the past. The wellheads and the roadways to access the pumps are both subject to flooding.

Drought

Promote drought-tolerant landscaping/site design: Drought conditions have strained water supply in recent years. A particular issue has been summer usage to maintain lawns.

Implement drought-tolerant landscaping on town properties: Implement landscaping projects and highlight the efforts, in order to promote adoption of practices by residents.

Advance permaculture to improve water quality and groundwater levels: The Town is working on a project in the Walker Pond watershed to improve soil quality for water retention and infiltration. Residents will be encouraged to adopt highlighted practices. The Town will seek to expand the project to other sub watersheds upon completion of the Walker Pond demonstration project.

Landslide

Identify areas of potential landslide risk: The town has no recorded history of landslides but will evaluate where the potential for landslide may exist.

Rising Temperatures

Extreme Heat and Heatwaves

Purchase a generator for the library: A generator for the library is a priority as the library serves as a cooling center.

Investigate the feasibility of solar canopies at town sites: The canopies generate clean energy, and with battery storage, could provide for energy resilience in the event of power outages. The Town is currently investigating several locations for a project.

Develop a tree removal mitigation program: Develop a bylaw to ensure replacement of trees that are removed.

Wildfires

Provide public education on fire risk: Address illegal burning and fire risks.

Map forest access roads. Maintain adequate access: Utilize GIS to map the forest access roads. Develop and implement plan to assure maintenance of adequate access.

Invasive species

Develop forestry management plan for treatment plant property: The 70-acre property has significant dead wood. Invasives have contributed to the poor condition of the forest. Develop a plan to determine the best strategies to address the dead wood and improve and maintain the health of the forested land.

Extreme Weather

Hurricanes/Tropical storms: see Multihazards

Severe Winter Storm/Nor'easter

Develop brining capacity: The Town has experienced more frequent icing conditions. The use of brine melts ice more quickly and can reduce the need for salt application. The Town will investigate purchase of equipment for brining or fabrication of a system.

Tornadoes: see Multihazards

Other Severe Weather: see Multihazards

Multihazards

Address generator needs: Install a permanent generator at the Senior Center at the Heights. Install generators at the sewer pump stations as they are upgraded.

Non-Climate Hazard

Earthquake

Assess retrofit or replacement costs of older town buildings: Consider condition of older town buildings that predate Building Code seismic requirements.

SECTION 9: PLAN ADOPTION & MAINTENANCE

PLAN ADOPTION

The Needham Hazard Mitigation Plan 2020 Update was adopted by the Select Board on [ADD DATE]. See Appendix D for documentation. The plan was approved by FEMA on [ADD DATE] for a five-year period that will expire on [ADD DATE].

PLAN MAINTENANCE

MAPC worked with the Needham Hazard Mitigation Team to prepare this plan. This group will continue to meet on an as-needed basis to coordinate the implementation and maintenance of this plan. A member of the Town staff will be designated as the team coordinator. Additional members could be added to the local team from businesses, non-profits, and institutions. The Town will encourage public participation during the next 5-year planning cycle. As updates and a review of the plan are conducted by the Hazard Mitigation Team, these will be placed on the Town's web site, and any meetings of the Hazard Mitigation Team will be publicly noticed in accordance with town and state open meeting laws.

IMPLEMENTATION AND EVALUATION SCHEDULE

Mid-Term Survey on Progress – The coordinator of the Hazard Mitigation Team will prepare and distribute a survey in year three of the plan. The survey will be distributed to all the local team members and other interested local stakeholders. The survey will poll the members on progress and accomplishments for implementation, any new hazards or problem areas that have been identified, and any changes or revisions to the plan that may be needed.

This information will be used to prepare a report or addendum to the local hazard mitigation plan in order to evaluate its effectiveness in meeting the plan's goals and identify areas that need to be updated in the next plan. The Hazard Mitigation Implementation Team will have primary responsibility for tracking progress, evaluating, and updating the plan.

Begin to Prepare for the next Plan Update – FEMA's approval of this plan is valid for five years, by which time an updated plan must be approved by FEMA in order to maintain the Town's approved plan status and its eligibility for FEMA mitigation grants. Given the lead time needed to secure funding and conduct the planning process, the Hazard Mitigation Implementation Team will begin to prepare for an update of the plan in year three. This will help the Town avoid a lapse in its approved plan status and grant eligibility when the current plan expires.

The Hazard Mitigation Implementation Team will use the information from the Mid-Term progress review to identify the needs and priorities for the plan update and seek funding for the plan update process. Potential sources of funding may include FEMA Pre-Disaster Mitigation grants and the Hazard Mitigation Grant Program. Both grant programs can pay for 75% of a planning project, with a 25% local cost share required.

Prepare and Adopt an Updated Local Hazard Mitigation Plan – Once the resources have been secured to update the plan, the Hazard Mitigation Team may decide to undertake the update themselves, contract with the Metropolitan Area Planning Council to update the plan or to hire another consultant. However, the Hazard Mitigation Implementation Team decides to update the

plan, the Town will need to review the current FEMA hazard mitigation plan guidelines for any changes in requirements for hazard mitigation plans since the previous plan. Once the next plan update is prepared, the Town will submit it to MEMA and FEMA for review and approval and adopt the plan update in order to obtain formal FEMA approval of the plan.

INTEGRATION OF THE PLANS WITH OTHER PLANNING INITIATIVES

Upon approval of the Needham Hazard Mitigation Plan 2020 Update by FEMA, the Local Hazard Mitigation Team will provide all interested parties and implementing departments with a copy of the plan and will initiate a discussion regarding how the plan can be integrated into that department's ongoing work. At a minimum, the plan will be reviewed and discussed with the following departments:

- Fire/Emergency Management
- Police
- Public Works
- Planning
- Council on Aging
- Building Department
- Conservation

Other groups that will be coordinated with include large institutions, Chambers of Commerce, land conservation organizations and watershed groups. The plan will also be posted on the Town's website with the caveat that a local team coordinator will review the plan for sensitive information that would be inappropriate for public posting. The posting of the plan on the website will include a mechanism for citizen feedback such as an e-mail address to send comments.

The hazard mitigation plan informed the development of the recently adopted Stormwater Management Bylaw and provided crucial data and analysis for the climate resilience planning completed by the Town and referenced in Appendix E. The Hazard Mitigation Plan will also be integrated into other town plans and policies as they are updated and renewed, including the Open Space and Recreation Plan, Comprehensive Emergency Management Plan, Master Plan, and Capital Plan.

SECTION 10: LIST OF REFERENCES

Town of Needham General By-Laws
Zoning By-Law of the Town of Needham
Town of Needham Community Resilience Building Workshop Summary of Findings 2020
Town of Needham Draft Open Space and Recreation Plan 2017
Blue Hill Observatory
FEMA, Flood Insurance Rate Maps for Norfolk County, MA, 2012
FEMA, Hazards U.S. Multi-Hazard
FEMA, Local Mitigation Plan Review Guide, October 2011
Fourth National Climate Assessment, 2018
Massachusetts Flood Hazard Management Program
Massachusetts Office of Coastal Zone Management Shoreline Change Data
Massachusetts Office of Dam Safety, Inventory of Massachusetts Dams 2018
Massachusetts State Hazard Mitigation Plan, 2013
Massachusetts State Hazard Mitigation and Climate Adaptation Plan, 2018
Metropolitan Area Planning Council, GIS Lab, Regional Plans and Data
National Weather Service
Nevada Seismological Library
New England Seismic Network, Boston College Weston Observatory, <http://aki.bc.edu/index.htm>
NOAA National Climatic Data Center, <http://www.ncdc.noaa.gov/>
Northeast Climate Adaptation Science Center
Northeast States Emergency Consortium, <http://www.nesec.org/>
Tornado History Project
US Census, 2010 and American Community Survey 2017 5-Year Estimates
USGS, National Water Information System, <http://nwis.waterdata.usgs.gov/usa/nwis>

APPENDIX A: MEETING AGENDAS

Needham Municipal Vulnerability Preparedness (MVP)
Hazard Mitigation Plan (HMP) Team Meeting

November 13, 2019

Public Service Administration Building

1. Welcome and Introductions
2. Overview and Purpose MVP and HMP projects
3. The role of this committee
4. MVP: a little more detail on the workshop
5. Set Date and Location of MVP Workshop
6. Discussion of Workshop Invitees
7. HMP: Update hazard areas, critical infrastructure, new development sites
8. Next steps

Needham Municipal Vulnerability Preparedness/ Hazard Mitigation Plan

Team Meeting
December 10, 2019
10:00-12:00
Charles River Room

MVP: Workshop – Friday, January 10, 9:30 to 3:30

1. Check in on invitations, logistics
2. Review the workshop agenda
3. Review the workshop posters
4. Identify the top four hazards

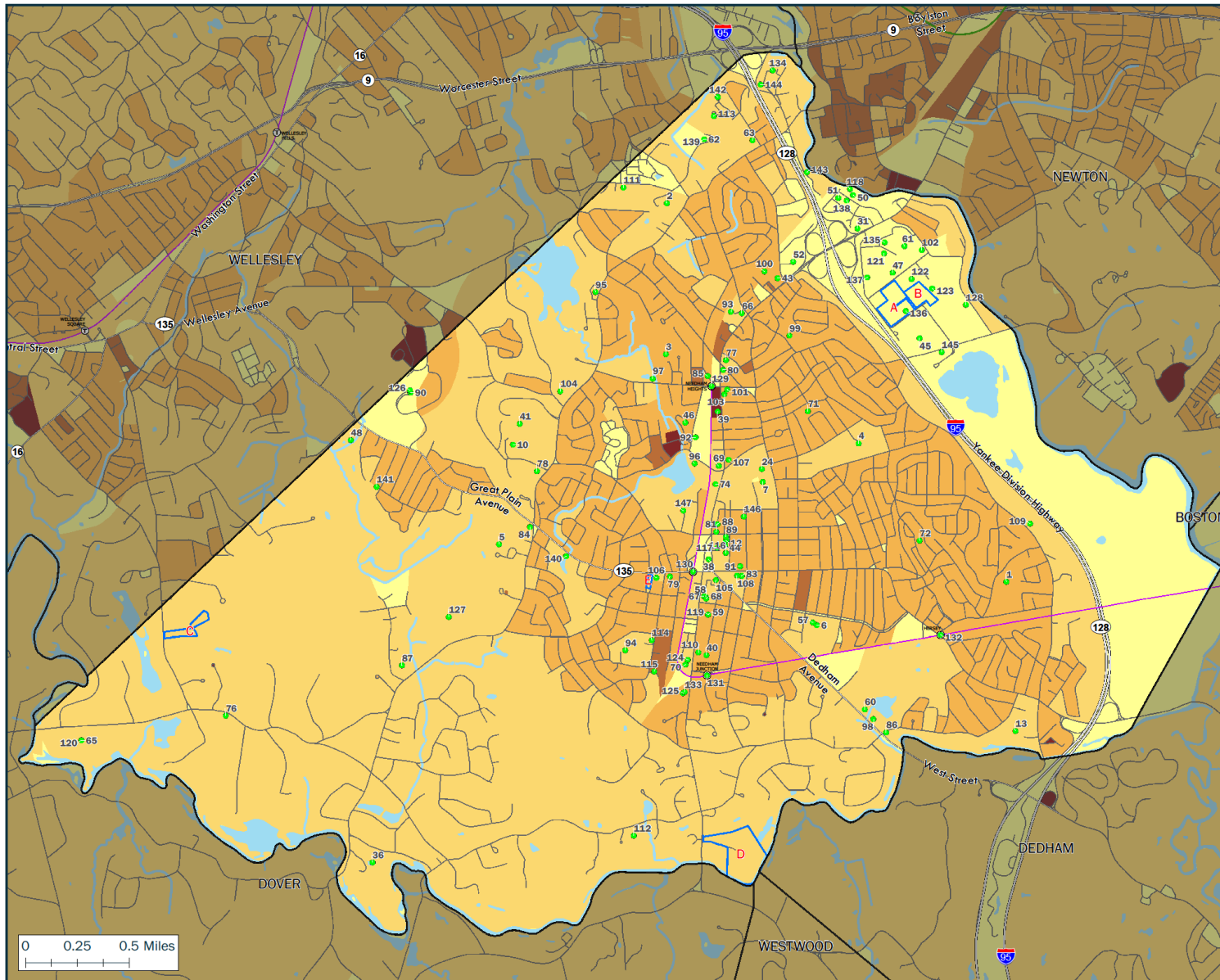
HMP

5. Review pre-existing mitigation measures from the 2008 plan
6. Review mitigation goals from the 2008 plan

Needham Municipal Vulnerability Preparedness/
Hazard Mitigation Plan
Team Meeting
May 21, 2020
1:30 – 3:30
via Zoom

1. Recap 1st public meeting and feedback
2. Review Hazard Mitigation goals
3. Develop mitigation measures for the plan update
4. Next steps – public meeting

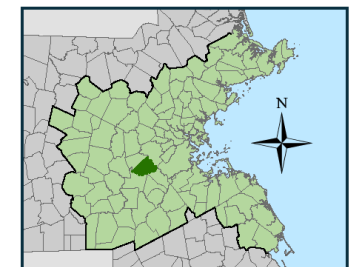
APPENDIX B: HAZARD MAPPING



FEMA Hazard Mitigation Planning Grant NEEDHAM, MA

Map 1: Population Density

- Sites**
- Critical Infrastructure*
 - Development Areas
- * See details in separate table
- All Roads**
- Interstate
 - U.S. Highway
 - State Route
 - Street
- Water Bodies**
- Population Density**
- Census 2010 Blocks**
- People per acre**
- 0 or No Data
 - 0.1 - 5.0
 - 5.1 - 15.0
 - 15.1 - 30.0
 - More than 30
- Rail**
- ⊙ Stations
 - Commuter Rail



The information depicted on this map is for planning purposes only. It is not adequate for legal boundary definition, regulatory interpretation, or parcel-level analyses.

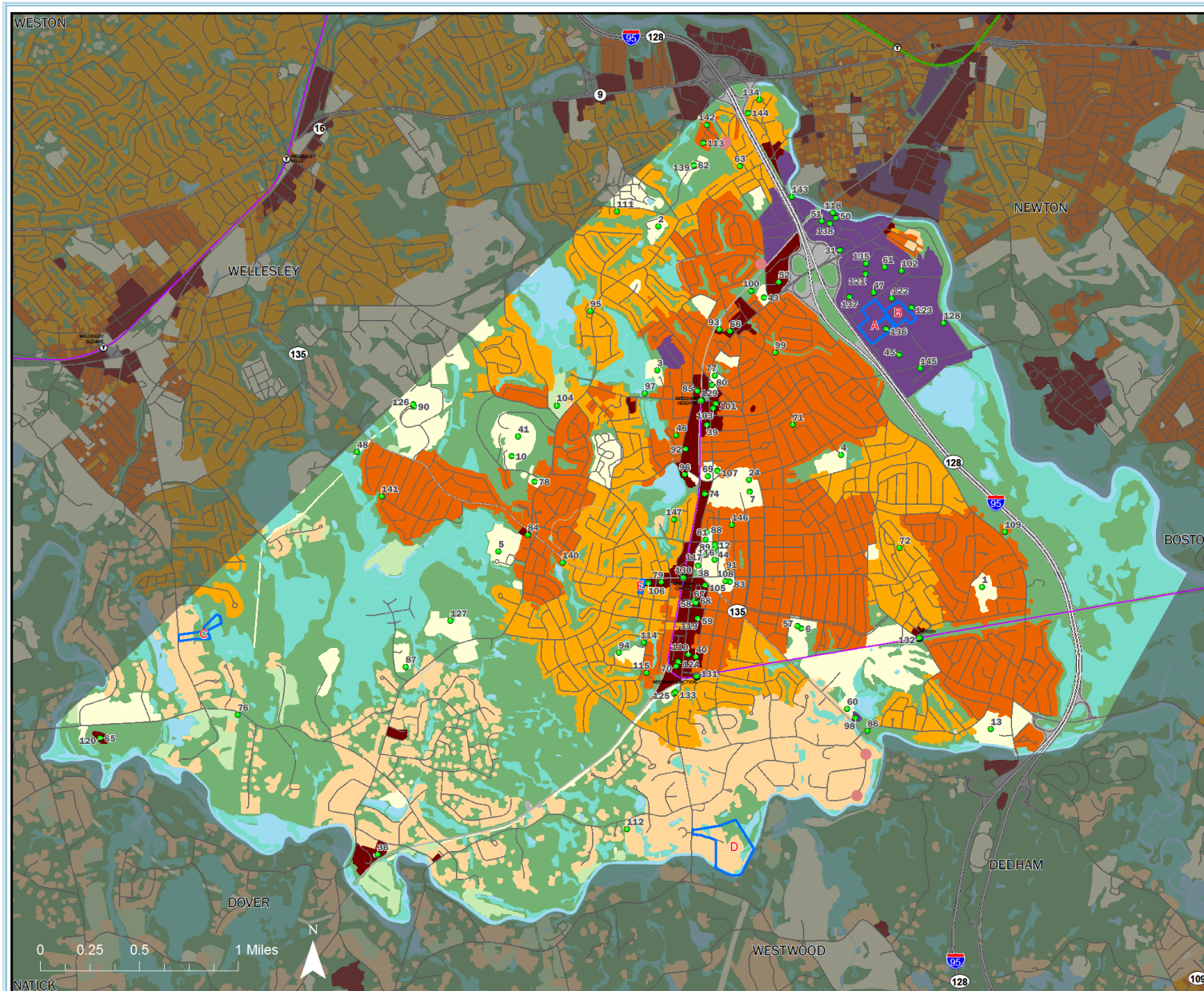
Produced by MAPC Data Services
60 Temple Place, Boston, MA 02111 (617) 451-2770

Data Sources:
Metropolitan Area Planning Council (MAPC)
Massachusetts Geographic Information System (MassGIS)
Northeast States Emergency Consortium (NESEC)
Massachusetts Emergency Management Agency (MEMA)
Federal Emergency Management Agency (FEMA)

NEEDHAM, MA

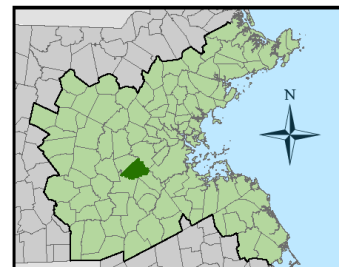
Date: 6/2/2020

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FEMA Hazard Mitigation Planning Grant
NEEDHAM, MA
 Map 2: Land Use

- Sites**
- Critical Infrastructure
 - Repetitive Loss Sites
 - Development Areas
 - Water Bodies
- All Roads**
- Interstate
 - U.S. Highway
 - State Route
 - Streets
- Rail**
- Stations
 - Commuter Rail
- Land Use**
- High Density Residential
 - Medium Density Residential
 - Low Density Residential
 - Non-Residential Developed
 - Commercial
 - Industrial
 - Transportation
 - Agriculture
 - Undeveloped
 - Undeveloped Wetlands

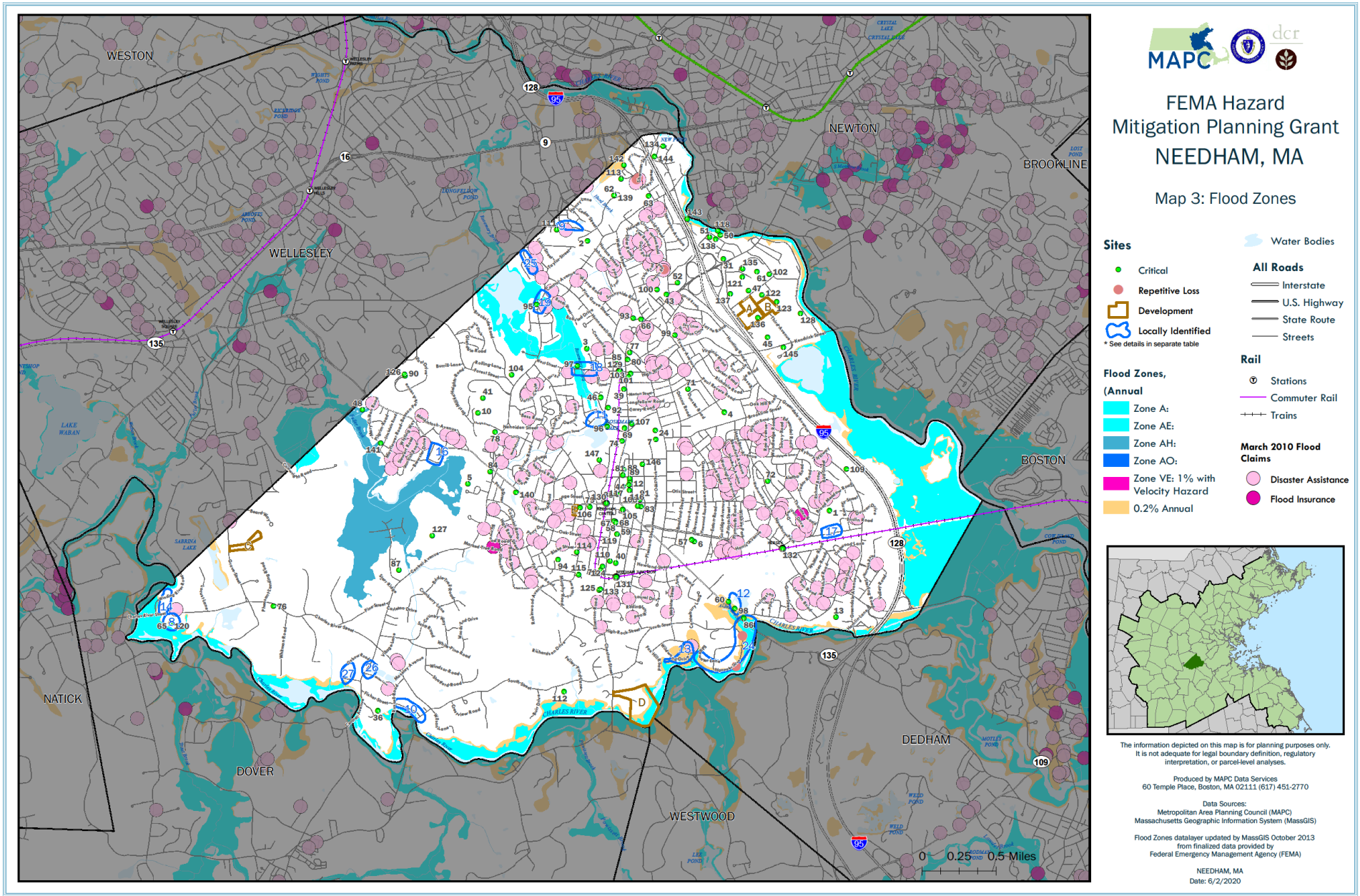


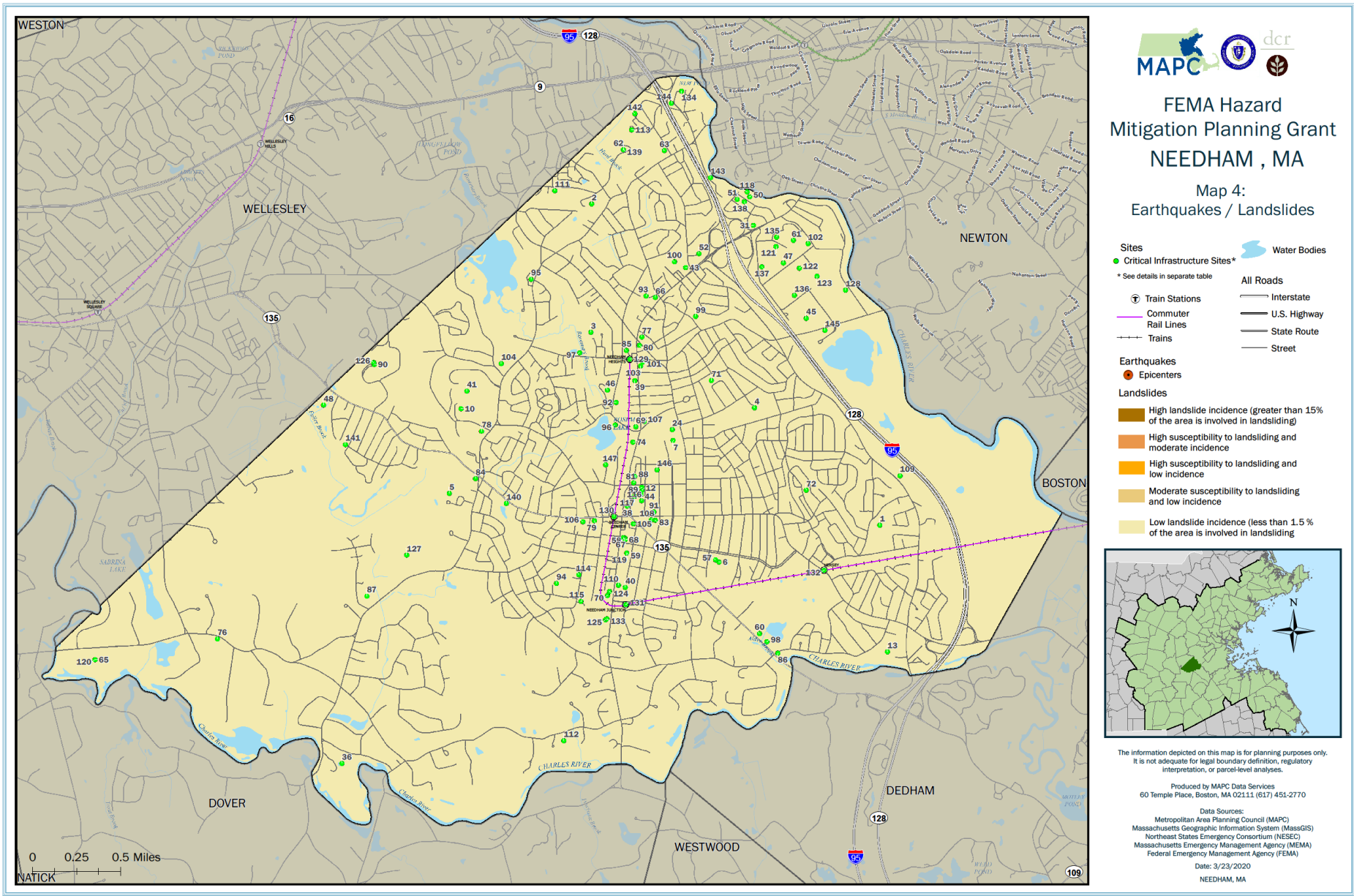
The information depicted on this map is for planning purposes only. It is not adequate for legal boundary definition, regulatory interpretation, or parcel-level analyses.

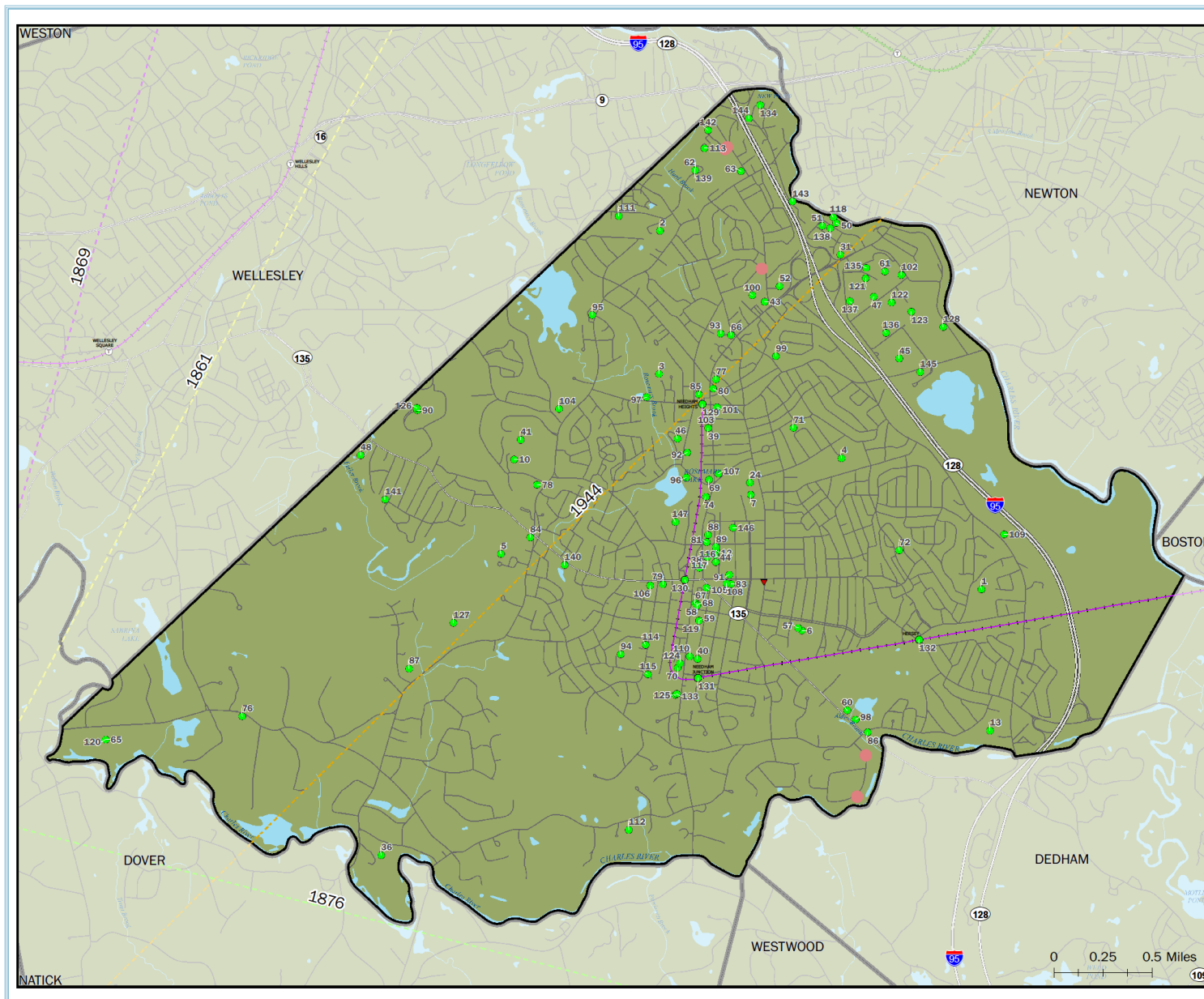
Produced by MAPC Data Services
60 Temple Place, Boston, MA 02111 (617) 451-2770

Data Sources:
Metropolitan Area Planning Council (MAPC)
Massachusetts Geographic Information System (MassGIS)
Northeast States Emergency Consortium (NESEC)
Massachusetts Emergency Management Agency (MEMA)
Federal Emergency Management Agency (FEMA)

NEEDHAM, MA
Date: 6/2/2020



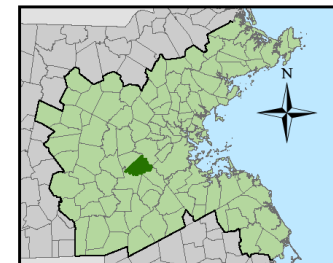




FEMA Hazard Mitigation Planning Grant NEEDHAM, MA

Map 5: Hurricanes / Tornadoes

- Sites**
- Critical Infrastructure Sites*
 - Repetitive Loss Sites
- * See details in separate table
- 100 Year Wind Speeds**
- Miles Per Hour
- 90 MPH
 - 100 MPH
 - 110 MPH
 - 120 MPH
 - 130 MPH
- Tornadoes**
- ▼ Tornado
- Storm Tracks**
- Tropical Depression
 - Tropical Storm
 - Category 1 Hurricane
 - Category 2 Hurricane
 - Category 3 Hurricane
- Year of storm noted on map
- Hurricane Surge Inundation Area**
- Hurricane Surge Inundation Area



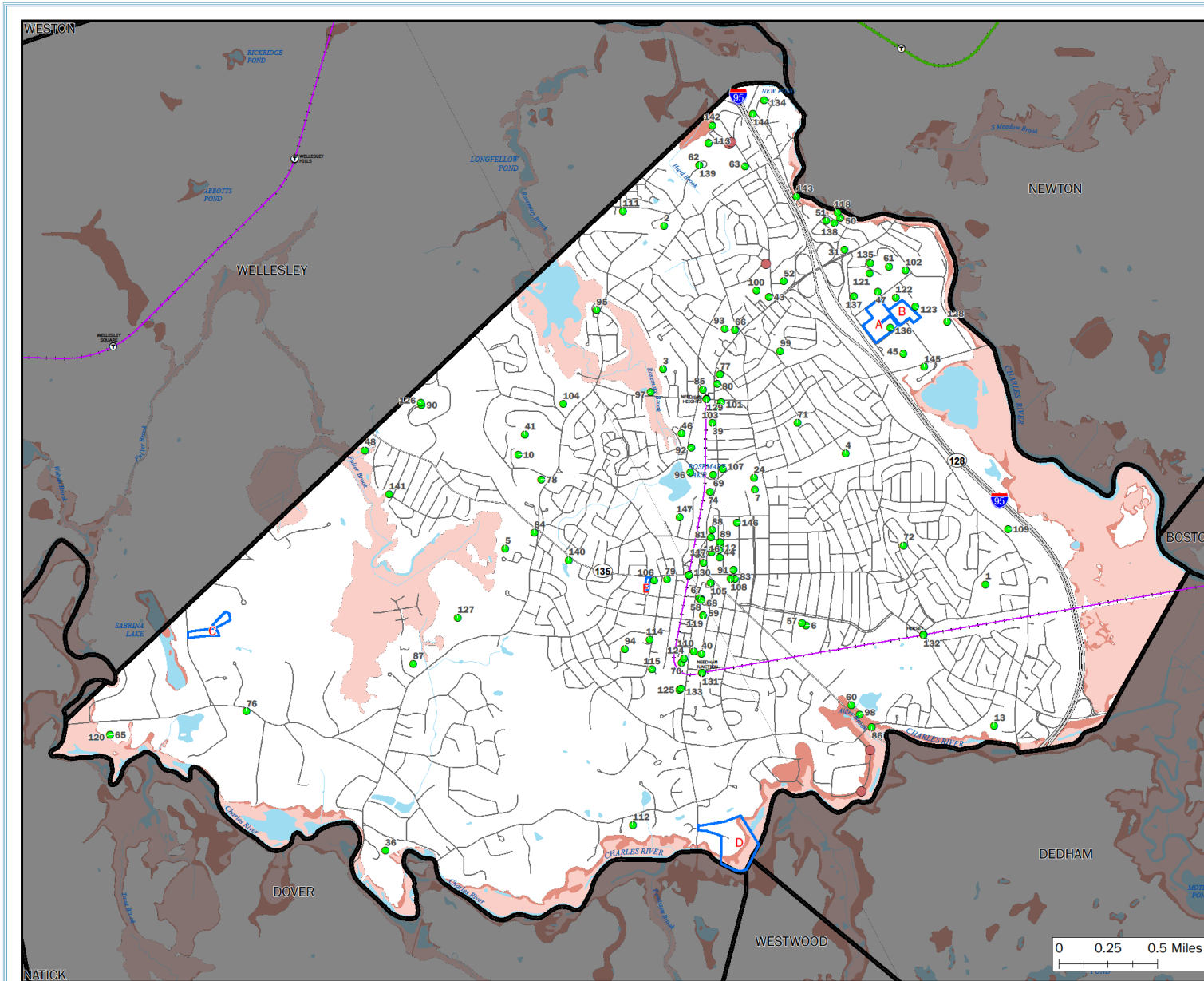
The information depicted on this map is for planning purposes only. It is not adequate for legal boundary definition, regulatory interpretation, or parcel-level analyses.

Produced by MAPC Data Services
60 Temple Place, Boston, MA 02111 (617) 451-2770

Data Sources:
Metropolitan Area Planning Council (MAPC)
Massachusetts Geographic Information System (MassGIS)
Northeast States Emergency Consortium (NESEC)
Massachusetts Emergency Management Agency (MEMA)
Federal Emergency Management Agency (FEMA)

Date: 3/23/2020

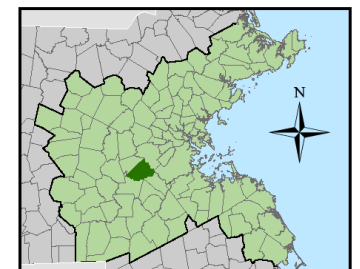
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FEMA Hazard Mitigation Planning Grant NEEDHAM, MA

Map 7:
Composite Natural Hazards

- Sites**
- Critical Infrastructure
 - Repetitive Loss Sites
 - Development Areas
* See details in separate table
- Composite Natural Hazards**
- Low (2 Hazards)
 - Moderate (3 Hazards)
 - High (4 Hazards)
 - Very High (5 Hazards)
- Composite natural hazards shown for areas of existing development. Hazards include:
- 100 year wind speed of 110 MPH or higher
 - Moderate landslide risk
 - FEMA flood zones (100 year and 500 year)
 - Average snowfall of 36.1" or more
 - Hurricane surge inundation areas
- Water Bodies**
- All Roads**
- Interstate
 - U.S. Highway
 - State Route
 - Street
 - Train Stations
 - Commuter Rail Lines
 - Trains
 - Subway Lines
 - Blue
 - Green
 - Orange
 - Red
 - Silver

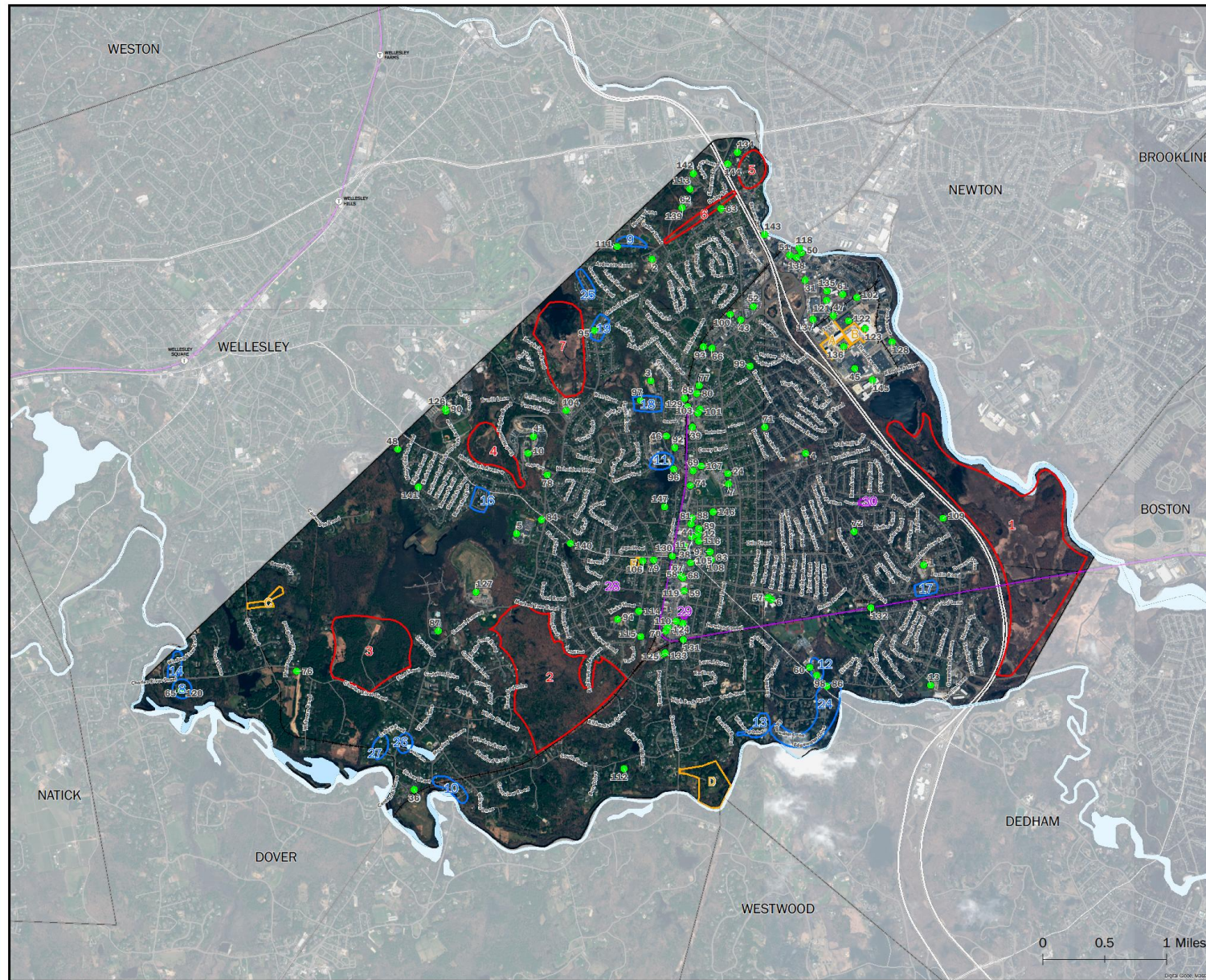


The information depicted on this map is for planning purposes only. It is not adequate for legal boundary definition, regulatory interpretation, or parcel-level analyses.

Produced by MAPC Data Services
60 Temple Place, Boston, MA 02111 (617) 451-2770

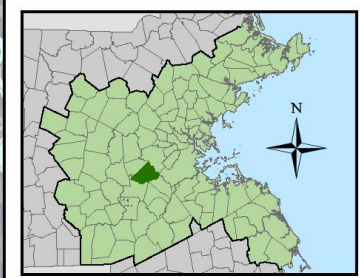
Data Sources

Composite Natural Hazard:
Wind, Landslide Risk, Snow - Northeast States Emergency Consortium (NESEC)
Flood Zones - 2013 FEMA/MassGIS
Hurricane Surge - 2013 U.S. Army Corps of Engineers, New England District
Roads/Trains: MassDOT/CTPS
Repetitive Loss Sites: DCR/Office of Flood Hazard Management
Critical Infrastructure: Metropolitan Area Planning Council (MAPC) /
NEEDHAM, MA
Date: 6/2/2020



FEMA Hazard
Mitigation Planning Grant
NEEDHAM, MA
Map 8: Local Hazard Areas

- Sites**
- Critical Infrastructure Sites*
 - Repetitive Loss Sites
 - * See details in separate table
- Locally Identified Hazard Areas**
- Red outline: Brush Fires
 - Blue outline: Flooding
 - Yellow outline: Historic
 - Orange outline: Development Sites
 - * See Section IV Risk Assessment
- Transportation**
- Train Stations
 - Commuter Rail Lines
 - Trains
- All Roads**
- Interstate
 - U.S. Highway
 - State Route
 - Street



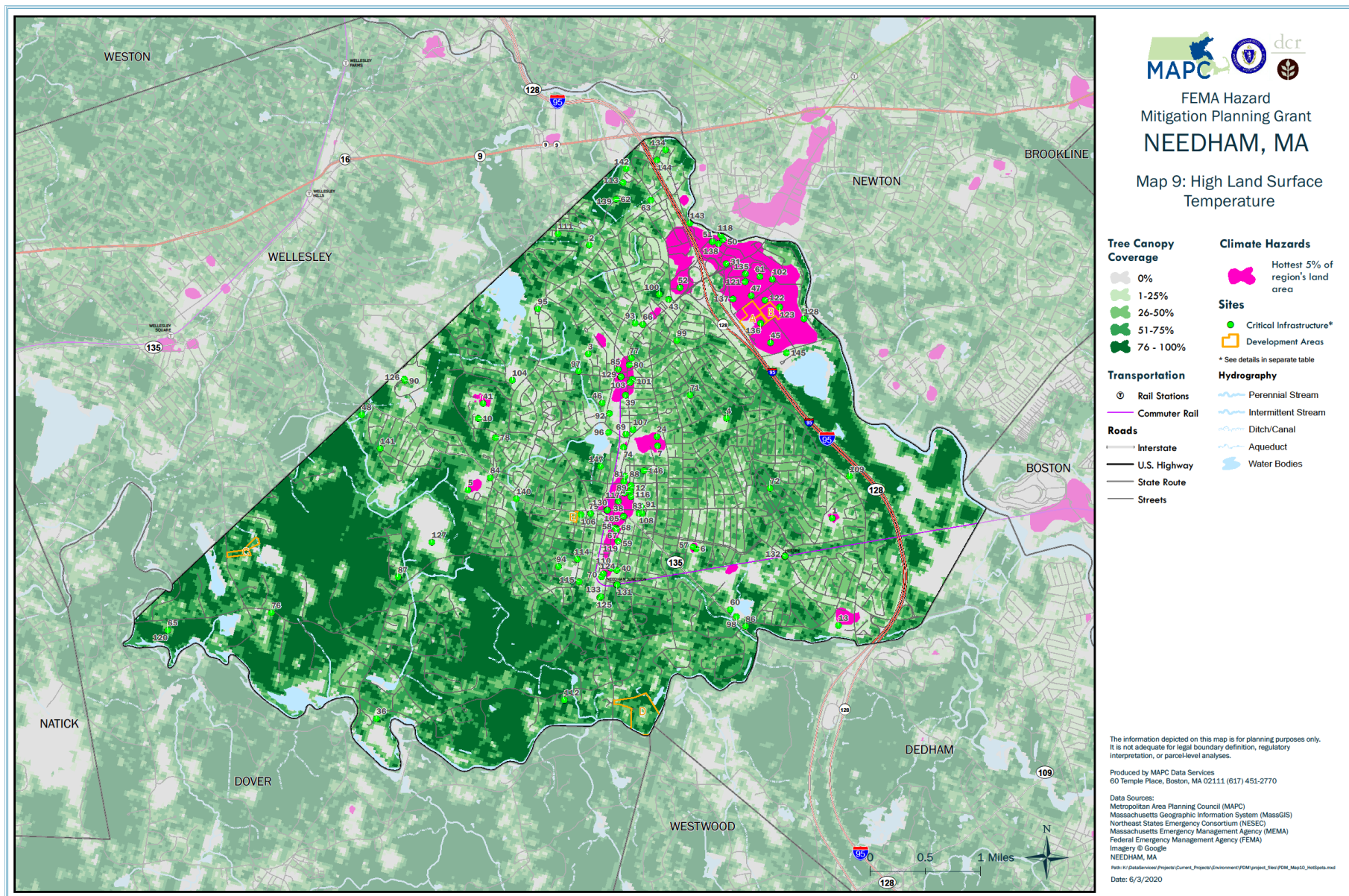
The information depicted on this map is for planning purposes only. It is not adequate for legal boundary definition, regulatory interpretation, or parcel-level analyses.

Produced by MAPC Data Services
60 Temple Place, Boston, MA 02111 (617) 451-2770

Data Sources:
Metropolitan Area Planning Council (MAPC)
Massachusetts Geographic Information System (MassGIS)
Northeast States Emergency Consortium (NESEC)
Massachusetts Emergency Management Agency (MEMA)
Federal Emergency Management Agency (FEMA)
Imagery © DigitalGlobe, 2015

NEEDHAM, MA
Date: 6/2/2020

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APPENDIX C: PUBLIC MEETINGS

CALENDAR LISTING / MEDIA ADVISORY

NEEDHAM DRAFT HAZARD MITIGATION AND CLIMATE PLANS TO BE PRESENTED VIRTUALLY MAY 4-18

*Presentation of Needham's Hazard Mitigation and Climate Plans
and solicit public comments*

Who: Needham residents, business owners, representatives of non-profit organizations and institutions, and others who are interested in preventing and reducing damage from natural hazards and increasingly extreme weather.

What: A video presentation and feedback survey available on line.

The Hazard Mitigation plan identifies natural hazards affecting Needham such as floods, hurricanes, winter storms, and earthquakes. The climate plan focuses on hazards associated with our warming climate. The plans include actions that the Town can take to reduce future vulnerability to these hazards. The public is invited to offer feedback on priorities the town has identified to prepare for future extreme weather.

When: May 4- May 18

Where: **Website link:**

<https://www.mapc.org/resource-library/needham-feedback/>

MAPC is the regional planning agency for 101 communities in the metropolitan Boston area, promoting smart growth and regional collaboration. More information about MAPC is available at www.mapc.org.

##

CLIMATE CHANGE AND NATURAL HAZARDS PREPAREDNESS



Our climate is changing and the Town of Needham is developing Climate and Hazard Mitigation plans to prepare for future extreme weather events. The plans will make the Town eligible to apply for funding of town priorities.

We are seeking your feedback on the priorities that should be included in the plans.

To learn about potential hazards facing Needham and provide your feedback please click the link to the website below. The site includes a short survey where you can offer your comments and suggestions about how Needham can best be prepared. Feedback received by May 18 will be included in the final report.

Website link:

<https://www.mapc.org/resource-library/needham-feedback/>

For more information, please contact Anne Herbst, Senior Environmental Planner at the Metropolitan Area Planning Council at (617) 933-0781 or email aherbst@mapc.org.

Amanda Linehan, Communications Manager, Metropolitan Area Planning Council
617-933-0705, alinehan@mapc.org

CALENDAR LISTING / MEDIA ADVISORY

NEEDHAM'S HAZARD MITIGATION PLAN TO BE DISCUSSED AT JUNE 9 PUBLIC MEETING

Who: Needham residents, business owners, non-profit organizations and institutions, and others who are interested in preventing and reducing damage from natural hazards.

What: At a public meeting on Wednesday, June 9 at 6:00 PM, a presentation on the *Needham Draft Hazard Mitigation Plan, 2020 Update* will be hosted by the Select Board. The presentation will be made by the Metropolitan Area Planning Council (MAPC), which is assisting the Town with the preparation of the updated Hazard Mitigation Plan. There will be an opportunity for questions and discussion following the presentation.

The Town of Needham has prepared the draft Hazard Mitigation plan to document natural hazards that affect the Town, such as floods, hurricanes, and severe winter storms, and to recommend actions that the Town can take to reduce its vulnerability to these hazards. Once completed and approved by the Federal Emergency Management Agency (FEMA), the Town will be eligible for federal Hazard Mitigation Grants from FEMA.

When: Tuesday, June 9, 2020, 6:00 PM

Where: Virtual meeting via Zoom
Link to meeting available at: <http://www.needhamma.gov/507/Agendas-Minutes>

HAZARD MITIGATION PLAN

PUBLIC MEETING

Natural hazards can have serious impacts on the Town of Needham and its residents



The Town of Needham has prepared a draft Hazard Mitigation Plan, as well as a Climate Plan, to help the town reduce its vulnerability to natural hazards such as flooding, hurricanes, and winter storms. Please join the Select Board for a public presentation of the Hazard Mitigation Plan. Your questions and suggestions for the draft plan are welcome, please join us!

Date: Tuesday, June 9, 2020

Time: 6:00 PM

Location: The meeting will be held virtually. Link available at: <http://www.needhamma.gov/507/Agendas-Minutes>

For more information, please contact Anne Herbst at (617) 933-0781 or email aherbst@mapc.org.

SELECT BOARD 6:00 p.m. June 9, 2020 Needham Town Hall Agenda

Under Governor Baker's emergency "Order Suspending Certain Provisions of the Open Meeting Law G.L. c. 30A, §20", issued March 12, 2020 and in effect until termination of the emergency, meetings of public bodies may be conducted virtually provided that adequate access is provided to the public.

To listen and view this virtual meeting on a phone, computer, laptop, or tablet, download the "Zoom Cloud Meeting" app in any app store or at www.zoom.us. At the above date and time, click on "Join a Meeting" and enter the meeting 81178733033 or click the link below to join the webinar:
<https://us02web.zoom.us/j/81178733033>.

5:45 Informal Meeting with Citizens One or more members of the Select Board will be available between 5:45 and 6:00 p.m. for informal discussion with citizens. While not required, citizens are encouraged to call the Select Board's Office at (781) 455-7500 extension 204 in advance to arrange for an appointment. This enables the Board to better assure opportunities for participation and respond to citizen concerns.

1. 6:00 Public Hearing – Transfer of All Alcoholic Beverages License Spiga LLC d/b/a Spiga located at 18 Highland Circle • Stephen Miller, Attorney • Marisa Iocco, Owner and Proposed New Manager

2. 6:10 Updates to Needham's Hazard Mitigation Plan and about the Municipal Vulnerability Preparedness Program • Ms. Anne Herbst, Senior Regional Environmental Planner, Metropolitan Area Planning Council • Ms. Kim Donovan, Compliance Coordinator, Needham Department of Public Works

3. 6:25 Joint meeting with Park & Recreation Commission

4. 6:45 Alteration of Premises for Ray's New Garden

5. 7:00 Town Manager • Naming of Public Safety Building Community Room • Town Manager's Report

6. 7:15 Board Discussion • Economic Development • Committee Reports

CONSENT AGENDA * = Backup attached

1. Accept a \$60 donation made to the Needham Health Division's Traveling Meals program from Douglas and Susan Carpenter.

2. Approve placement of "June is Pride Month in Needham" signs on Town Hall property for a period of two weeks.

3.* Approve minutes of May 20, 2020 and May 27, 2020.

APPENDIX D: PLAN ADOPTION

<TOWN LETTERHEAD>

**CERTIFICATE OF ADOPTION
SELECT BOARD
TOWN OF NEEDHAM, MASSACHUSETTS**

A RESOLUTION ADOPTING THE
TOWN OF NEEDHAM HAZARD MITIGATION PLAN 2020 UPDATE

WHEREAS, the Town of Needham established a Committee to prepare the *Town of Needham Hazard Mitigation Plan 2020 Update*; and

WHEREAS, the *Town of Needham Hazard Mitigation Plan 2020 Update* contains several potential future projects to mitigate potential impacts from natural hazards in the Town of Needham, and

WHEREAS, duly noticed public meetings were held by the LOCAL HAZARD MITIGATION PLANNING TEAM on May 4-18, 2020 and June 9, 2020 and

WHEREAS, the Town of Needham authorizes responsible departments and/or agencies to execute their responsibilities demonstrated in the plan, and

NOW, THEREFORE BE IT RESOLVED that the Town of Needham Select Board adopts the *Town of Needham Hazard Mitigation Plan 2020 Update*, in accordance with M.G.L. 40 §4 or the charter and bylaws of the Town of Needham.

ADOPTED AND SIGNED this Date. _____

Name(s)

Title(s)

Signature(s)

APPENDIX E: MVP WORKSHOP RESULTS

Highest Priorities

Develop communication strategies: Several groups proposed targeted outreach to specific populations including seniors, low income residents, limited English language speakers, people with disabilities, people with cell phones, and people who work in Needham but live elsewhere. Creating a neighbor-to-neighbor outreach program was proposed.

Communicate and address health impacts: Provide outreach and education about extreme heat impacts and, mosquito and tick-borne illnesses. Develop heat exposure guidelines. Create a permanent shade structure at Rosemary Pond. Develop mosquito control plans, consider a regional plan, support environmentally friendly strategies.

Stormwater: While many groups highlighted Needham's new Stormwater Bylaw as a strength, stormwater management was identified as a top priority. Suggestions included providing needed funding and a long-term plan, addressing stormwater needs on large developments and ensuring new developments have increased capacity, incorporating nature-based solutions and, analyzing and planning for retrofits of undersized systems.

Water infrastructure: Monitoring and assessing vulnerabilities of the system was a general priority. Protecting the wells and water treatment plant, which are subject to flooding, was a key concern. In addition, assuring the protection and functioning of the St. Mary's Pump Station, town interconnections, and sewer pump stations was highlighted.

Tree and Forest Management: Develop a forest management plan to address invasive species, pests, and vulnerability to fire. Develop a tree bylaw. Identify locations to plant trees.

Ensure robust infrastructure: Consider cyber security, redundancy, and generator backup.

Upgrade the Central Avenue Bridge: Coordinate the work with the Town of Dover.

Focus on wetlands: Incorporate more climate concerns and resiliency in the local bylaw. Provide public education on the value and importance of wetlands.

Focus on seniors in public housing: Upgrade the building and infrastructure. Create additional green space. Develop a communications and coordination plan for emergencies.

Focus on residents with medical needs: Develop a list of medically fragile people for wellness visits during emergencies. Communicate the list with the hospital to ensure capacity for likely patients in the event of emergency.

Create a disaster response plan: The plan should include evacuation strategies.

Focus on hazardous materials: Map hazardous materials sites and communicate the information to the hospital.

NEEDHAM SELECT BOARD

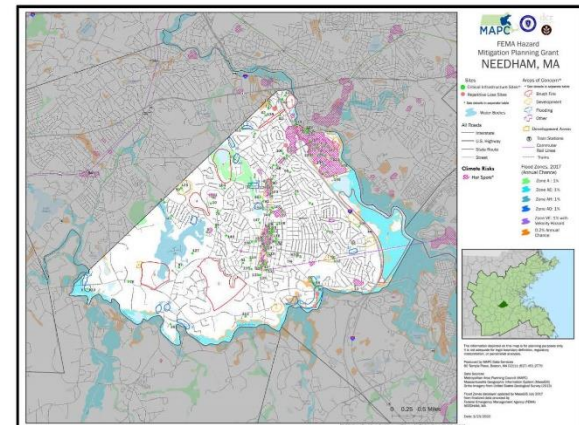
Tuesday, December 22, 2020

Needham Hazard Mitigation Plan Adoption

AGENDA

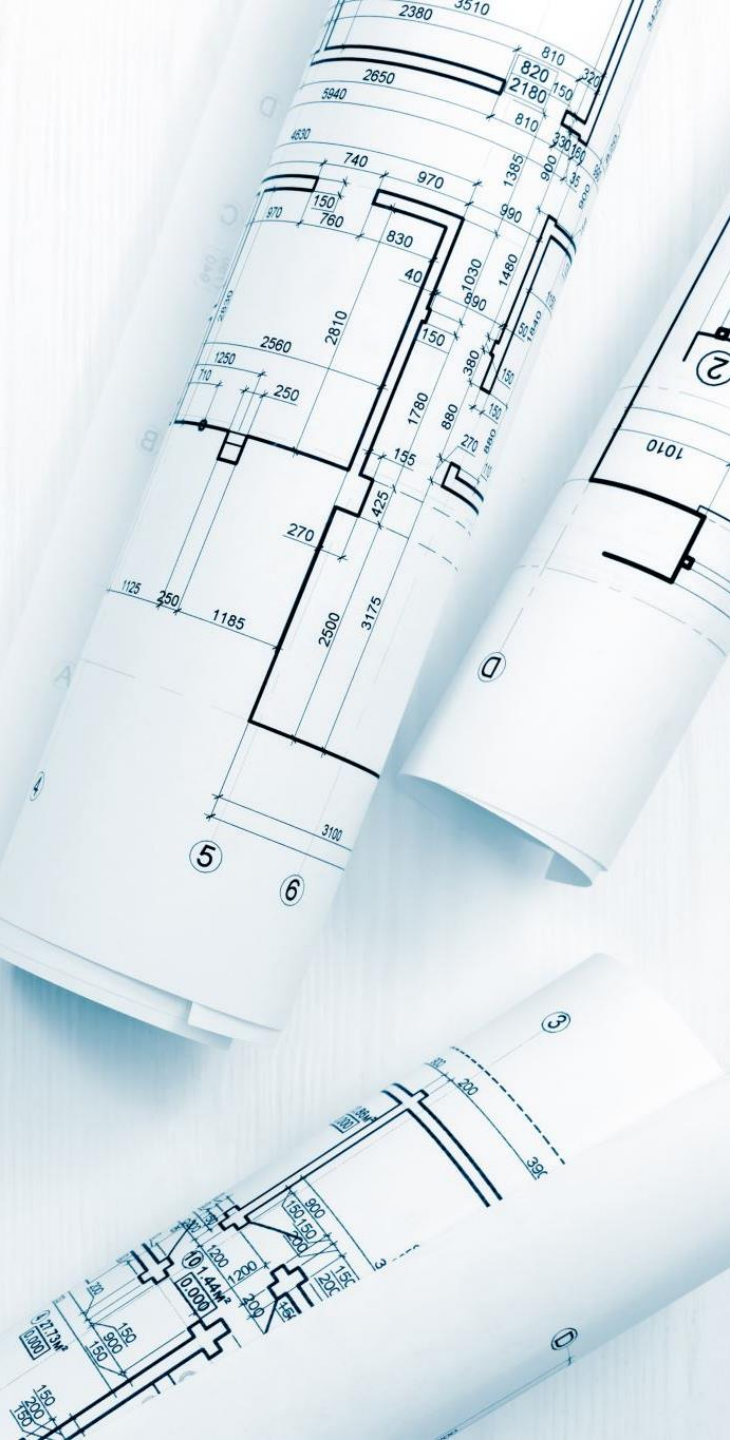
- Steps completed
- Plan approval and adoption
- Finalization of HMP
- Implementing the plan

**TOWN OF NEEDHAM
HAZARD MITIGATION PLAN
2020 UPDATE**



MAPC 50 YEARS
 METROPOLITAN AREA PLANNING COUNCIL
 SMART GROWTH AND REGIONAL COLLABORATION

**Final Plan
FEMA Approval Pending Adoption
October 9, 2020**



STEPS COMPLETED

-
- Development of Hazard Mitigation Plan (HMP)
 - Draft HMP posted for public comment (6/5/2020)
 - Public Meeting with the Needham Select Board (6/9/2020)
 - Draft HMP submitted to MEMA (6/25/2020)
 - Draft HMP submitted to FEMA (8/10/2020)
 - Approval pending adoption of draft HMP (10/9/2020)

PLAN APPROVAL AND ADOPTION

1. Draft plan reviewed by MEMA and FEMA, revisions if needed
2. FEMA issues notice of “Approval Pending Adoption”
3. **Select Board vote to adopt the plan**

FINALIZATION OF HMP

1. FEMA issues formal plan approval
2. Approved plan in effect for 5 years
3. Town is eligible for FEMA mitigation grants

IMPLEMENTING THE PLAN

1. Periodic review by Town departments
2. Integrate the plan's recommendations with other local plans and policies
3. Identify funding sources and other resources for implementation
4. Prepare for plan update, Year 4
5. Conduct plan update, Year 5





**CERTIFICATE OF ADOPTION
SELECT BOARD
TOWN OF NEEDHAM, MASSACHUSETTS**

A RESOLUTION ADOPTING THE
TOWN OF NEEDHAM HAZARD MITIGATION PLAN 2020 UPDATE

WHEREAS, the Town of Needham established a Committee to prepare the *Town of Needham Hazard Mitigation Plan 2020 Update*; and

WHEREAS, the *Town of Needham Hazard Mitigation Plan 2020 Update* contains several potential future projects to mitigate potential impacts from natural hazards in the Town of Needham, and

WHEREAS, duly noticed public meetings were held by the LOCAL HAZARD MITIGATION PLANNING TEAM on May 4-18, 2020 and June 9, 2020 and

WHEREAS, the Town of Needham authorizes responsible departments and/or agencies to execute their responsibilities demonstrated in the plan, and

NOW, THEREFORE BE IT RESOLVED that the Town of Needham Select Board adopts the *Town of Needham Hazard Mitigation Plan 2020 Update*, in accordance with M.G.L. 40 §4 or the charter and bylaws of the Town of Needham.

ADOPTED AND SIGNED this Date. _____

Kate Fitzpatrick, Town Manager



**Select Board
TOWN OF NEEDHAM
AGENDA FACT SHEET**

MEETING DATE: 12/22/2020

Agenda Item	COVID-19 Update
Presenter(s)	Timothy McDonald, Director of Health & Human Services

1.	BRIEF DESCRIPTION OF TOPIC TO BE DISCUSSED
The Director of Health & Human Services will provide an update to the Board regarding COVID-19.	
2.	VOTE REQUIRED BY SELECT BOARD
None.	
3.	BACK UP INFORMATION ATTACHED
None.	



**Select Board
TOWN OF NEEDHAM
AGENDA FACT SHEET**

MEETING DATE: 12/22/20

Agenda Item	2020 Public Water System Award
Presenter(s)	Carys Lustig, Interim Director of Public Works, Sean Harrington, Superintendent of Water, Sewer, and Drains, Steve Cusick, Water Treatment Plant Manager

1.	BRIEF DESCRIPTION OF TOPIC TO BE DISCUSSED
Because of Needham's excellent compliance in calendar year 2019, our system is being recognized by the Massachusetts Department of Environmental Protection, Drinking Water Program (MassDEP/DWP) and the Awards Committee as a recipient in the 2020 Public Water System Award Program! The world, as we know it, has been transformed since the start of the COVID-19 Pandemic and the 2020 Public Water System Awards Program is no exception. This year's program was strictly compliance-based; the systems that have had no enforcement or compliance issues for 2019 and the prior five years (which is rather an impressive feat to achieve) are included. Out of 779 community and non-transient non-community systems in the state you are in the top 12.1%.	
2.	VOTE REQUIRED BY SELECT BOARD
<i>Discussion Only</i>	
3.	BACK UP INFORMATION ATTACHED
a) Outstanding Performance and Achievement In the Medium and Large Community Systems Category in 2019 – Certificate b) MassDEP Letter Dated 12/2/2020	



The Commonwealth of Massachusetts
Department of Environmental Protection
Drinking Water Program

2020

Public Water System Award

is presented to the

Needham Water Department

PWS ID 3199000

For Outstanding Performance and Achievement

In the Medium and Large Community Systems Category in 2019.

Yvette dePeiza – Program Director
MassDEP Drinking Water Program



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

One Winter Street Boston, MA 02108 • 617-292-5500

Charles D. Baker
Governor

Karyn E. Polito
Lieutenant Governor

Kathleen A. Theoharides
Secretary

Martin Suuberg
Commissioner

Needham Water Department
Christopher E Seariac
500 Dedham Ave
Needham, MA 02492

December 2, 2020

Dear Mr. Seariac:

The Massachusetts Department of Environmental Protection's (MassDEP) Drinking Water Program is pleased to extend its congratulations to the Needham Water Department for its outstanding performance in 2019. Your system has achieved one of the top compliance scores in the Medium and Large Community System category of the 2020 Public Water System Awards Program.

MassDEP realizes that it is no easy task to keep up with the ever-evolving federal and state drinking water regulations. Your compliance efforts have not gone unnoticed.

MassDEP encourages you to continue this level of excellence in carrying out your work of protecting and supplying safe and fit water to our citizens. If you have any questions regarding the Awards Program, please contact Program.Director-DWP@mass.gov, Subject: Awards - Marie Tennant.

Please be aware that because of the current pandemic that there will be no live Awards Day Celebration this year, however, we would like to virtually celebrate all award recipients. If you wish your system to be included in our award winners' pictorial montage on our webpage, please email one to three digital photos and/or a short 20-second video (cell phones are fine) of you and your staff possibly at your facility holding your award certificate or even action shots of your staff completing tasks. Send them to: Program.Director-DWP@mass.gov, subject: Awards – Marie Tennant.

This information is available in alternate format. Contact Michelle Waters-Ekanem, Director of Diversity/Civil Rights at 617-292-5751.
TTY# MassRelay Service 1-800-439-2370
MassDEP Website: www.mass.gov/dep

Printed on Recycled Paper

The award recipients' photos will be compiled into a montage and be posted on the web at: <https://www.mass.gov/info-details/2019-public-water-system-awards>.

Please send in your photos/video by **December 16, 2020**. The montage will be up on the website by December 23, 2020.

Congratulations,

A handwritten signature in black ink, appearing to read "Yvette DePeiza", written in a cursive style.

Yvette DePeiza, Program
Director Drinking Water Program

Attachment



**Select Board
TOWN OF NEEDHAM
AGENDA FACT SHEET**

MEETING DATE: 12/22/20

Agenda Item	Tree City USA – 25 th Year
Presenter(s)	Carys Lustig, Interim Director of Public Works, Edward Olsen, Superintendent of Parks & Forestry

1.	BRIEF DESCRIPTION OF TOPIC TO BE DISCUSSED
	For the 25 th year Needham has been recognized as a Tree City USA. This is awarded to communities that meet the 4 standards of sound urban forestry management and validates the Town's commitment to preserving and adding trees to our community.
2.	VOTE REQUIRED BY SELECT BOARD
	<i>Discussion Only</i>
3.	BACK UP INFORMATION ATTACHED



**Select Board
TOWN OF NEEDHAM
AGENDA FACT SHEET**

MEETING DATE: 12/22/20

Agenda Item	How the RTS Has Adapted to COVID-19 Protocols
Presenter(s)	Greg Smith, Superintendent of Recycling and Solid Waste, Carys Lustig, Interim Director of Public Works

1.	BRIEF DESCRIPTION OF TOPIC TO BE DISCUSSED
	During the pandemic the RTS has continued to serve the citizens of Needham as an essential service. In the short and long term, the facility has implemented changes to ensure the safety of the staff and visitors and continue to meet the basic needs of the community. Some of these changes have presented new opportunities on how we are utilizing our site and processing waste, and others have presented on-going challenges.
2.	VOTE REQUIRED BY SELECT BOARD
	<i>Discussion Only</i>
3.	BACK UP INFORMATION ATTACHED



**Select Board
TOWN OF NEEDHAM
AGENDA FACT SHEET**

MEETING DATE: 12/22/2020

Agenda Item	COVID-19 Expense Update
Presenter(s)	Kate Fitzpatrick, Town Manager David Davison, Assistant Town Manager/Finance
1.	BRIEF DESCRIPTION OF TOPIC TO BE DISCUSSED
We will update the Board about the expenses that the Town has incurred related to COVID-19 and the current outlook for FY2021.	
2.	VOTE REQUIRED BY SELECT BOARD
Discussion only	
	BACK UP INFORMATION ATTACHED
a. FY2021 Actual COVID-19 Expenses Paid Submitted for Reimbursement through CARES	

FY2021 Actual COVID-19 Expenses Paid Submitted for Reimbursement through CARES

Department	Description	Paid Expense	Reimbursed at 25%	Reimbursed at 100%	Total Reimbursement
	Compliance and Reporting Staff Costs	\$1,766.26	\$441.57		\$441.57
Finance Department	Total	\$1,766.26			\$441.57
	Accelerated Telework Capacity	\$1,441.97		\$1,441.97	\$1,441.97
Finance/Information Technology Center	Total	\$1,441.97			\$1,441.97
	Cleaning/Disinfecting of Public Buildings	\$53.17	\$13.29		\$13.29
	Direct Staffing Costs (Payroll)	\$14,896.95	\$3,724.24		\$3,724.24
	PPE	\$3,336.15	\$834.04		\$834.04
Fire Department	Total	\$18,286.27			\$4,571.57
	Cleaning/Disinfecting of Public Buildings	\$590.00		\$590.00	\$590.00
	Direct Staffing Costs (Payroll)	\$5,068.13	\$1,267.03		\$1,267.03
	PPE	\$651.10	\$162.78		\$162.78
Health and Human Services	Total	\$6,309.23			\$2,019.81
	Legal Fees	\$4,406.50		\$4,406.50	\$4,406.50
Legal Services	Total	\$4,406.50			\$4,406.50
	Accelerated Telework Capacity	\$7,306.19		\$7,306.19	\$7,306.19
	Signage and Communication	\$613.97	\$153.43		\$153.43
Office of the Town Manager	Total	\$7,920.16			\$7,459.62
	Communications to the Public	\$3,979.00	\$994.75		\$994.75
Park and Recreation	Total	\$3,979.00			\$994.75
	Accelerated Telework Capacity	\$14,709.19	\$0.00	\$14,709.19	\$14,709.19
	Cleaning/Disinfecting of Public Buildings	\$43,438.39	\$10,859.60		\$10,859.60
	PPE	\$83,986.10	\$20,996.53		\$20,996.53
	School Distance Learning	\$70,719.00	\$0.00	\$70,719.00	\$70,719.00
	School Distance Learning - Spec. Ed.	\$28,793.88	\$0.00	\$28,793.88	\$28,793.88
	Social Distancing Measures in Public Buildings	\$111,814.45	\$27,953.61		\$27,953.61
Public Schools	Total	\$353,461.01			\$174,031.81
	Compliance and Reporting Staff Costs	\$1,081.06	\$270.27		\$270.27
Public Works Administration	Total	\$1,081.06			\$270.27

FY2021 Actual COVID-19 Expenses Paid Submitted for Reimbursement through CARES

	Cleaning/Disinfecting of Public Buildings	\$446,866.84	\$111,264.09	\$1,810.48	\$113,074.57
	Direct Staffing Costs (Payroll)	\$45,181.82	\$11,295.46		\$11,295.46
	HVAC	\$110,861.86	\$27,715.47	\$0.00	\$27,715.47
	PPE	\$20,727.48	\$4,816.23	\$1,462.56	\$6,278.79
	Social Distancing Measures in Public Buildings	\$700.00	\$175.00		\$175.00
Public Works Building Maintenance	Total	\$624,338.00			\$158,539.28
	Cleaning/Disinfecting of Public Buildings	\$499.75	\$124.94		\$124.94
Public Works Wastewater	Total	\$499.75			\$124.94
	TOTALS	\$1,023,489.21			\$354,302.06



**Select Board
TOWN OF NEEDHAM
AGENDA FACT SHEET**

MEETING DATE: 12/22/2020

Agenda Item	Budget Priorities
Presenter(s)	Kate Fitzpatrick, Town Manager David Davison, Assistant Town Manager/Director of Finance Katie King, Assistant Town Manager/Director of Operations

1.	BRIEF DESCRIPTION OF TOPIC TO BE DISCUSSED
The Select Board reviewed the draft budget priorities at its meeting on November 24, 2020. The Town Manager will recommend that the Board approve the proposed budget priorities for the FY2022 Operating and Capital Budgets.	
2.	VOTE REQUIRED BY SELECT BOARD
<i>Suggested Motion:</i> That the Board approve the proposed budget priorities for the FY2022 Operating and Capital Budgets.	
3.	BACK UP INFORMATION ATTACHED
a. Budget Priorities for FY2022 dated December 22, 2020	

Select Board Budget Priorities for Fiscal Year 2022

Approved 12/22/2020

The Select Board has adopted the following core budget priorities for general government operations. These priorities served as a key guideline in our evaluation of departmental spending requests.

1. The primary goal of the Board is the maintenance and optimization of existing Town services during a pandemic along with financial, social, and economic crises.
2. In addition, mindful of the availability of revenue for appropriation, the Board has set the following priorities:
 - a. Support for items that contribute to the achievement of Town wide goals and objectives, including recovering from COVID-19 and advancing racial equity in Needham.
 - b. Support for the continuation of the Public Information Officer position.
 - c. Support for a five to ten-year plan for the renovation, reconstruction and/or preservation of the Town's capital assets in the most prudent, realistic, and efficient manner, including continued investment in buildings infrastructure, and fleet maintenance.
 - d. Support for initiatives that contribute to financial sustainability, including the maintenance of a debt service plan that balances capital needs with the Town's ability to pay, identification of alternative funding sources for traditional cash capital needs, evaluation of financing alternatives, and alignment of capital and maintenance needs with appropriate funding sources.
 - e. Support for initiatives aimed at achieving greater coordination and efficiency among Town departments and providing adequate resources to address identified service delivery and general administrative needs of the Town in a cost-effective manner.
 - f. Support for a funding mechanism for mandated water quality (stormwater) expenses.



**Select Board
TOWN OF NEEDHAM
AGENDA FACT SHEET**

MEETING DATE: 12/22/2020

Agenda Item	Approval of FY2021 – FY2022 Goals
Presenter(s)	Kate Fitzpatrick, Town Manager

1.	BRIEF DESCRIPTION OF TOPIC TO BE DISCUSSED
The Town Manager will recommend that the Board approve its statement of goals for FY2021 – 2022.	
2.	VOTE REQUIRED BY SELECT BOARD
<i>Suggested Motion:</i> That the Board approve its statement of goals for FY2021 – 2022.	
3.	BACK UP INFORMATION ATTACHED
(Describe backup below) a. FY2021 – FY2022 Select Board Goals	

FY2021-FY2022 Select Board Goals
Adopted: December 22, 2020

Temporary Goal – Manage the Town’s Response to the Covid-19 Pandemic, including:

- Collaborating with the Needham Public Schools to open and keep the schools open if it is safe to do so, with a particular emphasis on the importance of supporting building maintenance and HVAC efforts and resources.
- Reviewing options for public meetings to be held in-person and in-person/Zoom hybrid models when safe to do so.
- In collaboration with the Town Moderator, review options for holding the 2021 Annual Town Meeting.
- In collaboration with the Council on Aging, Department of Health & Human Services and the Library Trustees, support the phased re-opening of those facilities when it is safe to do so.
- Prepare for re-opening of other Town facilities at the appropriate time.
- Provide support for local businesses and reimagine use of parking lots and public spaces for this purpose.
- Monitor the impact of the pandemic on the Town budget.
- Ensure adequate staffing for the Town’s pandemic response and protection of residents, with a particular focus on our most vulnerable populations.
- Prepare for community-wide Covid-19 vaccine distribution.

Foster a productive dialogue about racism in Needham and produce actionable strategies to ensure Needham is a welcoming and inclusive community, and that all residents of Needham are safe and free from racism, discrimination and hate.

- Establish the Needham Unite Against Racism Initiative Working Group, ensuring that the work is informed by Black, Indigenous, and people of color (BIPOC), and others who have been marginalized due to their race or ethnicity.
- Review Town policies, programs, and practices and identify changes to address any that contribute to systemic racism, including specifically policing, housing, & education.
- Reschedule Over Zero Needham Response/Resiliency Network Workshop.
- Collect data on the experiences of those who live and work in Needham to inform future actions.
- Consider establishing a discrimination complaint process.
- Promote website pages that summarizes all Board, Commission, and Committee vacancies and how to apply.
- Act to diversify the candidate pool for Boards, Commissions and Committees.

- Work with the Human Rights Committee to review the charge, roles, and responsibilities of the Committee.

Maximize the use of Town assets and ensure that Town and School services are housed in buildings that provide suitable and effective environments.

Continuing Strategies Tier 1

- Determine the future use or disposition of Ridge Hill buildings.
- Evaluate options for funding a DPW facility on Dedham Avenue.

Continuing Strategies Tier 2

- Conduct an environmental assessment to facilitate discussion about the future use of Ridge Hill/Nike.

Monitoring & Oversight

- Monitor Progress of Public Safety Building and Fire Station #2.

Ensure appropriate Regulation and Assessment of, and Investment in Infrastructure.

Continuing Strategies Tier 2

- Evaluate the feasibility of creating a shared use path from Needham Heights to Wexford Street.
- Develop options for refreshing landscaping at public facilities.
- In conjunction with the Transportation Committee, review bus routes in Needham Crossing.
- In conjunction with the MBTA, explore options for increasing commuter parking.
- Develop a plan for NPDES compliance including Stormwater Regulations and a Stormwater Stabilization Fund.

New Initiatives

- Work with utility companies to improve coordination of Town construction and utility improvements and expansion.

Monitoring & Oversight

- In conjunction with the City of Newton and MassDOT, monitor progress toward the renovation of Highland Avenue from Webster Street to the Charles River.

Maintain and improve the vitality and economic success of the Town.

Continuing Strategies Tier 1

- In conjunction with the Planning Board, evaluate options for the redevelopment of the Industrial Zones along Route 128.
- Work with the CEA to develop priorities for economic development.

Continuing Strategies Tier 2

- In conjunction with the Planning Board, evaluate options for the redevelopment of Chestnut Street.

New Initiatives

- Work to keep local businesses open and attract new businesses considering the pandemic.

Expand energy efficient and environmentally sound operations for the Town and its residents and businesses.

Continuing Initiatives Tier 2

- Develop a report of the Town's climate resiliency efforts and discuss next steps.
- Evaluate options for solar installation in parking lots.

New Initiatives

- Explore the option of implementing an organics recycling program for the community

Maintain and develop amenities that contribute to the desirability of Needham as a place to live and work.

Continuing Strategies Tier 1

- In conjunction with stakeholders develop an overall strategy for review of housing projects that are proposed.
- Consider the merits of a tree preservation by-law.

Continuing Strategies Tier 2

- Evaluate ways to improve parking at the Needham Center Post Office, on Hillside Avenue, and at other locations.
- Work with the Park & Recreation Commission to create recreational opportunities in the downtown.
- Establish fishing areas at ponds and on the Charles River.
- Explore opportunities for increasing the amount and diversity of public art.
- In conjunction with the Park & Recreation Commission, evaluate options for creating a park ranger program.

- In conjunction with the Park & Recreation Commission, explore options for improving access to the Rosemary Camp property.
- Explore the possibility of sponsoring a summer beer garden event.

Monitoring & Oversight

- Discuss multi-modal transportation on the greenway between Newton and Needham.

Maintain and enhance the Town's Financial Sustainability.

Continuing Strategies Tier 1

- Discuss the impact of annual tax levy increases.
- Evaluate local option means-tested senior property tax relief programs.

Evaluate Town Operations and Administration.

Continuing Strategies Tier 1

- Develop and implement a policy guiding the use of banners.
- The Board will establish a schedule of meeting with appointed and elected boards on a regular basis.

Continuing Strategies Tier 2

- Consider criteria for reviewing proposed zoning changes.
- The Board will meet regularly with community stakeholders.
- Review liquor license regulations with respect to compliance issues.

New Initiatives

- Discuss oversight and reports needed from public safety
- Review the composition, structure and charge of two to three committees.
- Review operations and long-term service delivery model at the RTS.

In developing its statement of goals for the coming fiscal years, the Board identified both initiatives that may be addressed in future years, and general guiding principles that guide the goal setting process. This list will continue to be updated and refined:

Future Initiatives

- Work with the Planning Board to consider a street naming policy.
- Consider a plan for snow removal in the business districts.
- Evaluate the concept of constructing a hockey rink in a public/private partnership.
- Evaluate options for locating alternative transportation options (e.g. ZipCar and bike share services) in Needham.

- Evaluate options for locating information kiosks in Needham Center.

Guiding Principles

- Targeted options for property acquisition will be explored.
- The Town will work to develop a consensus with Newton regarding transportation options along the Highland Avenue/Needham Street corridor.
- Appropriate coordination of all the major road projects affecting the Town is a priority.
- Town policies and regulations will be reviewed and updated on a periodic basis.
- The Town will prioritize the reconstruction and repair of existing sidewalks before embarking on new sidewalk construction. The construction of new sidewalks will be offset by the removal of old, under-used sidewalks.
- Opportunities to install community art will be explored.
- The Town should be an age friendly community.
- The number of pedestrian accidents is concerning and should be addressed.
- The Town will conduct a Capital Facility Summit on a regular biennial basis.
- Emergency preparation and planning is a high priority.
- Opportunities for departmental consolidation and efficiency improvement will be identified and implemented.
- Opportunities to enhance communication with the public will always be considered.
- Opportunities to collaborate on additional programs and services that will benefit Needham's veterans will be explored and implemented.
- Opportunities for streamlining the permitting process will be explored and implemented.
- Opportunities to expand the distribution of notices of public hearing will be explored and implemented.
- Opportunities to address trash concerns Town-wide will be explored and implemented.
- The Town will work to keep the pools at Rosemary Recreation Complex open for the longest period possible between Memorial Day and Labor Day.
- The Board will continue to review the policy implication of the allocation of liquor licenses.



**Select Board
TOWN OF NEEDHAM
AGENDA FACT SHEET**

MEETING DATE: 12/22/2020

Agenda Item	Approve the FY2022 – FY2026 Capital Improvement Plan
Presenter(s)	Kate Fitzpatrick, Town Manager David Davison, Assistant Town Manager/Finance

1.	BRIEF DESCRIPTION OF TOPIC TO BE DISCUSSED
The Town Manager will recommend that the Board approve the FY2022 - 2026 Capital Improvement Plan for transmittal to the Finance Committee.	
2.	VOTE REQUIRED BY SELECT BOARD
<i>Suggested Motion:</i> that the Board approve the FY2022 – 2026 Capital Improvement Plan for transmittal to the Finance Committee.	
3.	BACK UP INFORMATION ATTACHED
a. Capital Project Recommendations for Fiscal Years 2022 – 2026 b. Individual Capital Requests were forwarded previously	

FY2022 - FY2026 Tier I Capital Recommendations

Title	Code*	Department	Function	Cat*	Department Request	Recommended Tier 1	Cash	Debt	TBD	Page
Capital Project Requests Tier One Recommendations FY2022										
Library Technology	M	Library	Community	1	48,500				48,500	P053
Permanent Message Boards	P	Engineering	Community	1	56,000				56,000	P060
Library Materials Handler	PS	Library	Community	2	100,000				100,000	P095
Library Space Planning	P	Library	Community	2	60,000				60,000	P093
Replace Unit 404 2012 Ford E350 VAN (14 Passengers)	C	COA	Community	4	90,050				90,050	P228
Open Space Acquisitions	PI	Recreation	Community	5	1,000,000				1,000,000	P149
Town Internet Control, Analysis and Reporting	P	ITC	General	1	75,000	75,000	75,000			P006
Hillside School Boiler Installation	M	Bldg. Maint	General	2	16,000	16,000	16,000			P135
Ridge Hill Building Demolition	GMU	Town Manager	General	2	885,000	746,891	746,891		138,109	P127
LIFEPAK 15 V4 Monitor/Defibrillator	N	Fire	Public Safety	1	30,577	30,577	30,577			P020
Personal Protective Equipment	M	Fire	Public Safety	1	43,358	43,358	43,358			P024
Public Safety Mobile Devices	P	Police	Public Safety	1	50,000	50,000	50,000			P005
Self Contained Breathing Apparatus	N	Fire	Public Safety	1	192,120	192,120	192,120			P022
Replace Unit C-02 2016 Chevrolet Tahoe	C	Fire	Public Safety	4	62,540	62,540	62,540			P228
Replace Unit R-03 2008 Ford E450 Ambulance	L	Fire	Public Safety	4	353,843	353,843	353,843			P228
Public Safety Building Project	NPU	Fire/Police	Public Safety	5	1,700,000	1,700,000		1,700,000		P238
Fleet Refurbishment	PB	Fleet	Public Works	1	150,000				150,000	P057
Specialty Equipment - Unit 334 Specialty Mower (PF)	P	Parks	Public Works	1	38,000	38,000	38,000			P066
Recycling and Transfer Station Property Improvements	M	Solid Waste	Public Works	3	480,000	480,000	480,000			P128

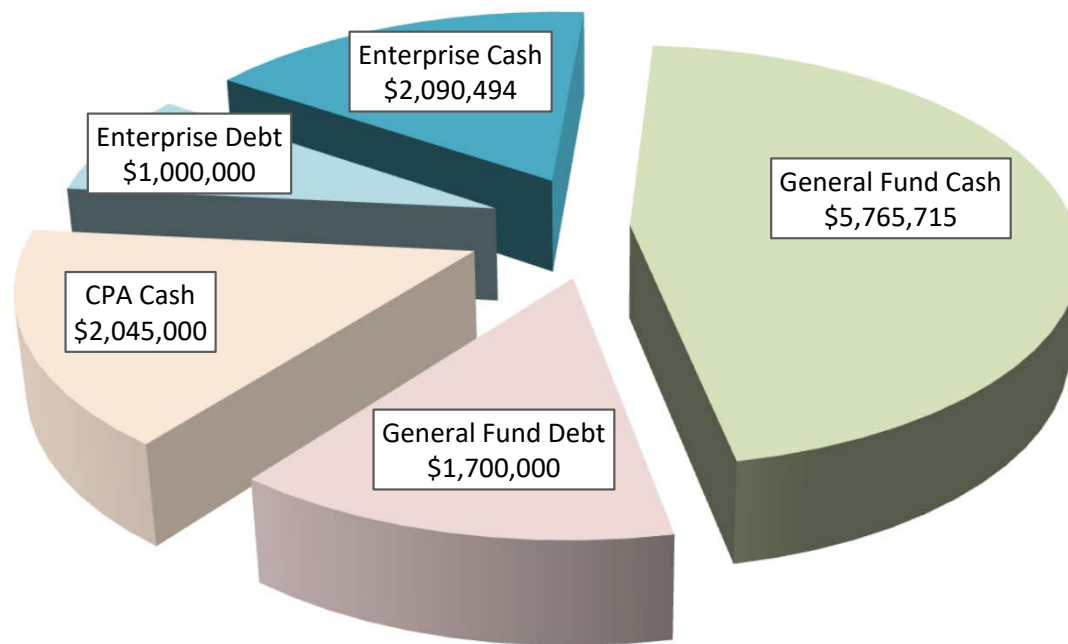
FY2022 - FY2026 Tier I Capital Recommendations

Title	Code*	Department	Function	Cat*	Department Request	Recommended Tier 1	Cash	Debt	TBD	Page
Replace Unit 10 2010 International 7400 Dump Truck	L	Highway	Public Works	4	284,119				284,119	P228
Replace Unit 32 2012 Ford F350	C	Highway	Public Works	4	61,916	61,916	61,916			P228
Replace Unit 39 2012 Ford F550 Dump Truck	L	Highway	Public Works	4	94,210				94,210	P228
Replace Unit 45 2012 FORD E150 VAN	C	Engineering	Public Works	4	54,973	54,973	54,973			P228
Replace Unit 712 2011 Ford Econ Van E250	C	Bldg. Maint	Public Works	4	69,831	69,831	69,831			P228
Replace Unit 756 2010 Ford F150	C	Bldg. Maint	Public Works	4	50,814	50,814	50,814			P228
Public Works Facilities Improvements	N	All	Public Works	5	60,000				60,000	P123
School Copiers	RM	Schools	Schools	1	61,264	61,264	61,264			P030
School Furniture	R	Schools	Schools	1	25,000				25,000	P036
School Technology	RM	Schools	Schools	1	479,650	479,650	479,650			P042
Broadmeadow School Technology Room Conversion	M	Schools	Schools	2	213,100	213,100	213,100			P067
Needs Assessment of Pollard, Newman and NHS Auditorium Theatrical Sound and Lighting Systems	P	Schools	Schools	2	60,000				60,000	P075
Pollard School Feasibility Study	N	Schools	Schools	2	280,000	280,000	280,000			P080
Replace Unit Van 10 2015 Toyota Sienna Van	C	Schools	Schools	4	51,419	51,419	51,419			P228
Replace Unit Van 9 2014 Toyota Sienna Van	C	Schools	Schools	4	51,419	51,419	51,419			P228
Mitchell Elementary School (new building)	M	Schools	Schools	5	1,250,000				1,250,000	P088
Pollard School Renovation/Expansion as 6-8 Middle School	M	Schools	Schools	5	3,500,000				3,500,000	P083
Renovate/Reconstruct Emery Grover Building at Highland Avenue Location (Option #3)	M	Schools	Schools	5	1,475,130				1,475,130	P070

FY2022 - FY2026 Tier I Capital Recommendations

Title	Code*	Department	Function	Cat*	Department Request	Recommended Tier 1	Cash	Debt	TBD	Page
NPDES Support Projects	M	Engineering	Stormwater	3	666,000				666,000	P165
Public Works Infrastructure Program	M	Highway	Transportation Network	3	2,639,000	2,203,000	2,203,000		436,000	P179
Energy Efficiency Upgrade Improvements	P	Various	Utilities	2	100,000	100,000	100,000			P109
TOTAL					16,958,833	7,465,715	5,765,715	1,700,000	9,493,118	
Community Preservation Fund										
Athletic Facility Improvements (DeFazio Synthetic Track)	M	Parks	Community	3	166,000	166,000	166,000			P156
Athletic Facility Improvements (McCloud Field renovation design)	P	Parks	Community	3	45,000	45,000	45,000			P156
Town Common Historic Redesign and Beautification	M	Parks	Community	3	1,364,000	1,364,000	1,364,000			P190
Walker Pond Improvements	N	Parks	Community	3	125,000	125,000	125,000			P197
Town Hall Clock Repairs	N	Town Manager	General	2	83,000	83,000	83,000			P134
Drain System Improvements	P	Sewer	Stormwater	3	262,000	262,000	262,000			P204
TOTAL					2,045,000	2,045,000	2,045,000			
Sewer Enterprise										
Sewer Main Greendale/Rte. 128 (Cheney to GPA)	M	Sewer	Utilities	3	363,000	363,000	363,000			P207
Replace Unit 17 2012 Ford F550 Dump Truck	L	Sewer	Utilities	4	94,210	94,210	94,210			P228
Replace Unit 19 2010 International 7400 Dump Truck	L	Sewer	Utilities	4	284,119	284,119	284,119			P228
Replace Unit 29 2008 International 7400	L	Sewer	Utilities	4	332,531	332,531	332,531			P228
TOTAL					1,073,860	1,073,860	1,073,860			

FY2022 Proposed Capital by Funding Source



General Fund Cash General Fund Debt CPA Cash Enterprise Debt Enterprise Cash

FY2022 - FY2026 Tier I Capital Recommendations

Title	Code*	Department	Function	Cat*	Department Request	Recommended Tier 1	Cash	Debt	TBD	Page
Water Enterprise										
Water Distribution System Improvements (Rosemary)	M	Water	Utilities	3	460,000	460,000	460,000			P217
Water Distribution System Improvements (South Street (Charles River to Chestnut))	M	Water	Utilities	3	250,000	250,000	250,000			P217
Water Service Connections	MR	Water	Utilities	3	1,000,000	1,000,000		1,000,000		P222
Replace Unit 25 2012 Ford F450 Utility Truck	L	Water	Utilities	4	92,437	92,437	92,437			P228
Replace Unit 30 2012 Ford F550 Dump Truck	L	Water	Utilities	4	135,452	135,452	135,452			P228
Replace Unit 40 Ford F350	C	Water	Utilities	4	78,745	78,745	78,745			P228
TOTAL					2,016,634	2,016,634	1,016,634	1,000,000		
FY2022 Grand Total					22,094,327	12,601,209	9,901,209	2,700,000	9,493,118	

FY2022 - FY2026 Tier I Capital Recommendations

Title	Code*	Department	Function	Cat*	Department Request	Recommended Tier 1	Cash	Debt	TBD	Page
Capital Project Requests Preliminary Tier One Recommendations FY2023										
Library Technology	M	Library	Community	1	26,280	26,280	26,280			P053
Permanent Message Boards	P	Engineering	Community	1	58,000	58,000	58,000			P060
Center at the Heights Generator Installation	MS	COA	Community	2	37,500	37,500	37,500			P099
Center at the Heights Space Utilization Study	PB	COA	Community	2	75,000	75,000	75,000			P102
Outdoor Basketball Courts	M	Recreation	Community	3	50,000	50,000	50,000			P141
Passive Recreation Improvements (Dwight Field/Charles River Center)	M	Parks	Community	3	39,000				39,000	P176
Open Space Acquisitions	PI	Recreation	Community	5	1,000,000				1,000,000	P149
GIS Technology Systems	P	ITC	General	1	120,000	120,000	120,000			P007
Town Offices Replacement Furniture	P	Manager	General	1	25,000	25,000	25,000			P001
Hillside School Boiler Installation	M	Bldg. Maint	General	2	235,000	235,000	235,000			P135
Replace Unit 452 2013 Ford Taurus	C	Assessing	General	4	35,758	35,758	35,758			P230
Personal Protective Equipment	M	Fire	Public Safety	1	45,525	45,525	45,525			P024
Public Safety Mobile Devices	P	Police	Public Safety	1	50,000	50,000	50,000			P008
Replace Unit C-06 2015 Ford F350	C	Fire	Public Safety	4	68,750	68,750	68,750			P230
Public Works Mobile Devices	P	Admin	Public Works	1	50,000	50,000	50,000			P009
Recycling and Transfer Station Property Improvements	M	Solid Waste	Public Works	3	124,500	124,500	124,500			P128
Replace Unit 108 2011 Trackless Tractor	LS	Highway	Public Works	4	184,821	184,821	184,821			P230
Replace Unit 112 2011 Prinoth (Sidewalk Tractor)	LS	Highway	Public Works	4	229,613	229,613	229,613			P230
Replace Unit 254 2013 Bandit Brush Chipper	L	Parks	Public Works	4	68,317	68,317	68,317			P230

FY2022 - FY2026 Tier I Capital Recommendations

Title	Code*	Department	Function	Cat*	Department Request	Recommended Tier 1	Cash	Debt	TBD	Page
Replace Unit 3 2012 Ford F450	L	Fleet	Public Works	4	75,910	75,910	75,910			P230
Replace Unit 350 2010 John Deere Loader	L	Parks	Public Works	4	64,971	64,971	64,971			P230
Replace Unit 5 2011 International 7400 Dump Truck	L	Solid Waste	Public Works	4	230,918	230,918	230,918			P230
Replace Unit 700 2012 Ford Econ Van E250	C	Bldg. Maint	Public Works	4	45,239	45,239	45,239			P230
Replace Unit 91 2000 CONSTRUCTION SCALP TRUCK	L	Solid Waste	Public Works	4	138,301	138,301	138,301			P230
School Copiers	RM	Schools	Schools	1	50,738	50,738	50,738			P030
School Furniture	R	Schools	Schools	1	25,000	25,000	25,000			P036
School Technology	RM	Schools	Schools	1	437,000	437,000	437,000			P042
Emery Grover Roof Replacement	MS	Schools	Schools	2	19,000				19,000	P106
Emery Grover Window Replacement	MS	Schools	Schools	2	34,200				34,200	P103
Pollard School Air Conditioning Upgrade	M	Schools	Schools	2	107,000	1,311,000		1,311,000		P118
Pollard School Locker Room Retrofit	M	Schools	Schools	2	653,000	653,000	653,000			P121
Replace Unit Bus 2 2017 Blue Bird 202 School Bus	L	Schools	Schools	4	99,785	99,785	99,785			P230
Renovate/Reconstruct Emery Grover Building at Highland Avenue Location (Option #3)	M	Schools	Schools	5	25,620,128				25,620,128	P070
NPDES Support Projects	M	Engineering	Stormwater	3	688,000	688,000	688,000			P168
Public Works Infrastructure Program	M	Highway	Transportation Network	3	3,233,000	2,655,000	2,655,000		578,000	P182
Traffic Improvements	P	Engineering	Transportation Network	3	50,000	50,000	50,000			P192
Energy Efficiency Upgrade Improvements	P	Various	Utilities	2	100,000	100,000	100,000			P109
TOTAL					34,195,254	8,108,926	6,797,926	1,311,000	27,290,328	

FY2022 - FY2026 Tier I Capital Recommendations

Title	Code*	Department	Function	Cat*	Department Request	Recommended Tier 1	Cash	Debt	TBD	Page
Community Preservation Fund										
Walker Pond Improvements	N	Parks	Community	3	356,000	356,000	356,000			P197
Athletic Facility Improvements (Broadmeadow & Eliot Fields renovation designs)	P	Parks	Community	3	107,000	107,000	107,000			P159
Athletic Facility Improvements (Claxton Field Lighting Installation)	M	Parks	Community	3	758,000	758,000	758,000			P158
Athletic Facility Improvements (Claxton Softball Field Skin construction)	M	Parks	Community	3	250,000	250,000	250,000			P158
Drain System Improvements	P	Sewer	Stormwater	3	2,070,000	2,070,000	2,070,000			P204
TOTAL					3,541,000	3,541,000	3,541,000			
Sewer Enterprise										
Sewer Main Greendale/Rte. 128 (Cheney to GPA)	M	Sewer	Utilities	3	2,018,250	2,018,250	1,018,250	1,000,000		P207
Cooks Bridge Sewer Pump Station	M	Sewer	Utilities	3	357,000				357,000	P201
Replace Unit 11 2013 Ford Explorer	C	Sewer	Utilities	4	38,851	38,851	38,851			P230
Replace Unit 37 2010 International 7500 Vactor	L	Sewer	Utilities	4	398,030	398,030	398,030			P230
TOTAL					2,812,131	2,455,131	1,455,131	1,000,000	357,000	
Water Enterprise										
Water Distribution System Improvements (South Street - CR to Chestnut)	M	Water	Utilities	3	2,900,000	2,900,000			2,900,000	P218
Water Supply Development	M	Water	Utilities	3	464,000				464,000	P224
Replace Unit 164 2008 Atlas Copco Trailer (Generator)	L	Water	Utilities	4	34,592	34,592			34,592	P230
TOTAL					3,398,592	2,934,592			3,398,592	
FY2023 Grand Total					43,946,977	17,039,649	11,794,057	2,311,000	31,045,920	

FY2022 - FY2026 Tier I Capital Recommendations

Title	Code*	Department	Function	Cat*	Department Request	Recommended Tier 1	Cash	Debt	TBD	Page
Capital Project Requests Preliminary Tier One Recommendations FY2024										
Library Technology	M	Library	Community	1	36,500	36,500	36,500			P053
Permanent Message Boards	P	Engineering	Community	1	60,000	60,000	60,000			P060
Video Projection Equipment Rosemary Recreation Complex	P	HHS	Community	1	55,000	55,000	55,000			P011
Center at the Heights Generator Installation	MS	COA	Community	2	250,000	250,000	250,000			P099
Cricket Field Building Improvements	PS	Recreation	Community	2	180,000				180,000	P096
Athletic Facility Improvements (Fencing)	P	Parks	Community	3	290,000	290,000	290,000			P160
Outdoor Basketball Courts	M	Recreation	Community	3	250,000	250,000	250,000			P141
Passive Recreation Improvements (Dwight Field/Charles River Center)	M	Parks	Community	3	389,000				389,000	P176
Public Playgrounds	M	Recreation	Community	3	25,000				25,000	P146
Open Space Acquisitions	PI	Recreation	Community	5	1,000,000				1,000,000	P149
Town Building Switchings	M	ITC	General	1	90,000	90,000	90,000			P010
Wireless Hardware Infrastructure	P	ITC	General	1	175,000	175,000	175,000			P012
Personal Protective Equipment	M	Fire	Public Safety	1	47,802	47,802	47,802			P024
Replace Unit 453 2016 Ford Focus	C	Building	Public Safety	4	35,441	35,441	35,441			P232
Replace Unit 454 2014 Ford Fusion	C	Building	Public Safety	4	35,441	35,441	35,441			P232
Replace Unit 455 2016 Ford Focus	C	Building	Public Safety	4	35,441	35,441	35,441			P232
Replace Unit 456 1014 Ford Fusion	C	Building	Public Safety	4	35,441	35,441	35,441			P232
Replace Unit L-01 2004 Sutphen Quint Ladder Truck	L	Fire	Public Safety	4	1,839,671	1,839,671		1,839,671		P232
Fleet Refurbishment	PB	Fleet	Public Works	1	150,000				150,000	P057

FY2022 - FY2026 Tier I Capital Recommendations

Title	Code*	Department	Function	Cat*	Department Request	Recommended Tier 1	Cash	Debt	TBD	Page
Recycling and Transfer Station Property Improvements	M	Solid Waste	Public Works	3	129,000	129,000	129,000			P128
Replace Unit 713 2012 Ford F450 Dump Truck	L	Bldg. Maint	Public Works	4	78,567	78,567	78,567			P232
Replace Unit 9 2012 INTERNATIONAL 7400 Dump	L	Highway	Public Works	4	268,830	268,830	268,830			P232
School Copiers	RM	Schools	Schools	1	34,656	34,656	34,656			P030
School Furniture	R	Schools	Schools	1	25,000	25,000	25,000			P036
School Technology	RM	Schools	Schools	1	460,750	460,750	460,750			P042
Emery Grover Roof Replacement	MS	Schools	Schools	2	239,000				239,000	P106
Emery Grover Window Replacement	MS	Schools	Schools	2	394,000				394,000	P103
Facility Assessment for Sustainable Building	P	Schools	Schools	2	50,000	50,000	50,000			P115
Pollard School Air Conditioning Upgrade	M	Schools	Schools	2	1,204,000				1,204,000	P118
Replace Unit Bus 1 2017 Blue Bird 202 School Bus	C	Schools	Schools	4	103,277	103,277	103,277			P232
High Rock Reconfigure as K-5 Elementary School	N	Schools	Schools	5	315,500				315,500	P077
Mitchell Elementary School (new building)	M	Schools	Schools	5	74,596,900				74,596,900	P088
Pollard School Renovation/Expansion as 6-8 Middle School	M	Schools	Schools	5	172,300,300				172,300,300	P083
NPDES Support Projects	M	Engineering	Stormwater	3	712,000	712,000	712,000			P180
Public Works Infrastructure Program	M	Highway	Transportation Network	3	3,445,000	3,186,000	3,186,000		259,000	P184
Traffic Improvements	P	Engineering	Transportation Network	3	50,000	50,000	50,000			P192
Energy Efficiency Upgrade Improvements	P	Various	Utilities	2	100,000	100,000	100,000			P109
TOTAL				5	259,486,517	8,433,817	6,594,146	1,839,671	251,052,700	

FY2022 - FY2026 Tier I Capital Recommendations

Title	Code*	Department	Function	Cat*	Department Request	Recommended Tier 1	Cash	Debt	TBD	Page
Community Preservation Fund										
Athletic Facility Improvements (McCloud Field renovation construction)	M	Parks	Community	3	466,000	466,000	466,000			P160
TOTAL					466,000	466,000	466,000			
Sewer Enterprise										
Replace Unit 103 2012 John Deere Backhoe	L	Sewer	Utilities	4	139,768	139,768	139,768			P232
TOTAL					139,768	139,768	139,768			
Water Enterprise										
Water Supply Development	M	Water	Utilities	3	1,350,000				1,350,000	P224
Water Distribution System Improvements (Mills/Sachem) (Mayo Ave - Harris Ave to GPA)	M	Water	Utilities	3	45,000	45,000	45,000			P219
TOTAL					1,395,000	45,000	45,000		1,350,000	
FY2024 Grand Total					261,487,285	9,084,585	7,244,914	1,839,671	252,402,700	

FY2022 - FY2026 Tier I Capital Recommendations

Title	Code*	Department	Function	Cat*	Department Request	Recommended Tier 1	Cash	Debt	TBD	Page
Capital Project Requests										
Preliminary Tier One Recommendations										
FY2025										
Permanent Message Boards	P	Engineering	Community	1	62,000	62,000	62,000			P060
Cricket Field Building Improvements	PS	Recreation	Community	2	1,000,000				1,000,000	P096
Athletic Fields Master Plan	G	Recreation	Community	3	75,000				75,000	P139
Outdoor Basketball Courts	M	Recreation	Community	3	50,000				50,000	P141
Public Playgrounds	M	Recreation	Community	3	250,000				250,000	P146
Open Space Acquisitions	PI	Recreation	Community	5	1,000,000				1,000,000	P149
Data Center Servers	M	ITC	General	1	600,000	600,000	600,000			P013
Town Building Security and Traffic Cameras	PIS	Police	General	1	350,000				350,000	P018
Town Offices Replacement Furniture	P	Manager	General	1	25,000	25,000	25,000			P003
Replace Unit 440 2017 Ford Explorer	L	ITC	General	4	38,305	38,305	38,305			P234
Personal Protective Equipment	M	Fire	Public Safety	1	50,192	50,192	50,192			P024
Taser Replacement	N	Police	Public Safety	1	35,000	35,000	35,000			P019
Replace Unit C-01 2017 Ford Explorer	C	Fire	Public Safety	4	62,924	62,924	62,924			P234
Replace Unit C-43 2017 Ford Escape	C	Fire	Public Safety	4	51,234	51,234	51,234			P234
Replace Unit E-04 2005 E-One Cyclone II fire Truck	L	Fire	Public Safety	4	900,004	900,004		900,004		P234
Replace Unit R-01 2016 Ford E450 Ambulance	L	Fire	Public Safety	4	392,312	392,312	392,312			P234
Replace Unit 111 2013 Trackless Sidewalk Plow Tractor	LS	Highway	Public Works	4	192,456	192,456	192,456			P234
Replace Unit 61 2013 Genie Forklift	L	Solid Waste	Public Works	4	90,754	90,754	90,754			P234
Replace Unit 66 Ford F550	L	Highway	Public Works	4	100,793	100,793	100,793			P234

FY2022 - FY2026 Tier I Capital Recommendations

Title	Code*	Department	Function	Cat*	Department Request	Recommended Tier 1	Cash	Debt	TBD	Page
Replace Unit 701 2014 Ford F250	C	Bldg. Maint	Public Works	4	44,950	44,950	44,950			P234
Replace Unit 72 2015 Ford F550 Chip Box	L	Parks	Public Works	4	92,390	92,390	92,390			P234
Replace Unit 93 2015 McCloskey Brothers Trommel Screener	L	Solid Waste	Public Works	4	138,841	138,841	138,841			P234
School Copiers	RM	Schools	Schools	1	71,722	71,722	71,722			P030
School Furniture	R	Schools	Schools	1	25,000	25,000	25,000			P036
School Technology	RM	Schools	Schools	1	581,150	581,150	581,150			P042
Facility Assessment for Sustainable Building	P	Schools	Schools	2	50,000	50,000	50,000			P115
Replace Unit Van 11 2018 Ford Transit Passenger Van	C	Schools	Schools	4	57,009	57,009	57,009			P234
Replace Unit Van 12 2018 Ford Transit Passenger Van	C	Schools	Schools	4	57,009	57,009	57,009			P234
NPDES Support Projects	M	Engineering	Stormwater	3	735,000	735,000	735,000			P172
Public Works Infrastructure Program	M	Highway	Transportation Network	3	3,448,000	3,448,000	3,448,000			P186
Traffic Improvements	P	Engineering	Transportation Network	3	50,000	50,000	50,000			P192
Energy Efficiency Upgrade Improvements	P	Various	Utilities	2	100,000	100,000	100,000			P109
TOTAL				5	10,777,045	8,052,045	7,152,041	900,004	2,725,000	
Community Preservation Fund										
Athletic Facility Improvements (Broadmeadow & Eliot School Fields renovations)	M	Parks	Community	3	1,121,000	1,121,000	1,121,000			P162
TOTAL					1,121,000	1,121,000	1,121,000			
Sewer Enterprise										
Sewer Main Greendale/Rte. 128 (Cheney to GPA)	M	Sewer	Utilities	3	9,315,000	9,315,000	1,315,000	8,000,000		P207
TOTAL					9,315,000	9,315,000	1,315,000	8,000,000		

FY2022 - FY2026 Tier I Capital Recommendations

Title	Code*	Department	Function	Cat*	Department Request	Recommended Tier 1	Cash	Debt	TBD	Page
Water Enterprise										
Water Distribution System Improvements (Kingsbury Street - Oakland Avenue to Webster)	M	Water	Utilities	3	112,500	112,500			112,500	P220
Water Distribution System Improvements (Mills/Sachem) (Mayo Ave - Harris Ave to GPA)	M	Water	Utilities	3	434,000	434,000			434,000	P220
Replace Unit 160 2013 Wach Utility Trailer Vac	L	Water	Utilities	4	67,654	67,654			67,654	P234
TOTAL					614,154	614,154			614,154	
FY2025 Grand Total					21,827,199	19,102,199	9,588,041	8,900,004	3,339,154	

FY2022 - FY2026 Tier I Capital Recommendations

Title	Code*	Department	Function	Cat*	Department Request	Recommended Tier 1	Cash	Debt	TBD	Page
Capital Project Requests Preliminary Tier One Recommendations FY2026										
Permanent Message Boards	P	Engineering	Community	1	64,000	64,000	64,000			P060
Outdoor Basketball Courts	M	Recreation	Community	3	550,000	550,000	550,000			P141
Open Space Acquisitions	PI	Recreation	Community	5	1,000,000				1,000,000	P149
Data Center Servers	M	ITC	General	1	750,000	750,000	750,000			P013
Personal Protective Equipment	M	Fire	Public Safety	1	52,701	52,701	52,701			P024
Replace Unit R-02 2017 Ford E450 Ambulance	L	Fire	Public Safety	4	406,043	406,043	406,043			P236
Replace Unit 104 2016 Volvo Front End Loader	L	Solid Waste	Public Works	4	302,274	302,274	302,274			P236
Replace Unit 116 2014 Prinoth Sidewalk Plow	LS	Highway	Public Works	4	199,631	199,631	199,631			P236
Replace Unit 41 2016 Ford F250 Truck	C	Parks	Public Works	4	46,524	46,524	46,524			P236
Replace Unit 42 2014 International 7400	L	Solid Waste	Public Works	4	256,023	256,023	256,023			P236
Replace Unit 50 2016 Ford F250 Truck	C	Parks	Public Works	4	48,943	48,943	48,943			P236
Replace Unit 703 2015 Ford Transit Van	C	Bldg. Maint	Public Works	4	31,572	31,572	31,572			P236
Replace Unit 708 2016 Ford Transit Van	C	Bldg. Maint	Public Works	4	35,828	35,828	35,828			P236
Replace Unit 73 2016 Ford F450 Truck	L	Parks	Public Works	4	78,424	78,424	78,424			P236
Replace Unit 74 2016 Ford F450 Dump	L	Parks	Public Works	4	129,197	129,197	129,197			P236
Replace Unit 75 2016 Ford F450 Truck	L	Parks	Public Works	4	78,424	78,424	78,424			P236
Replace Unit 8 2014 International 7400	L	Highway	Public Works	4	242,381	242,381	242,381			P236
School Copiers	RM	Schools	Schools	1	82,787	82,787	82,787			P030
School Furniture	R	Schools	Schools	1	25,000	25,000	25,000			P036

FY2022 - FY2026 Tier I Capital Recommendations

Title	Code*	Department	Function	Cat*	Department Request	Recommended Tier 1	Cash	Debt	TBD	Page
School Technology	RM	Schools	Schools	1	577,875	577,875	577,875			P042
Replace Unit Van 4 2019 Ford E150 Van	C	Schools	Schools	4	59,004	59,004	59,004			P236
Replace Unit Van 5 2019 Ford E150 Van	C	Schools	Schools	4	59,004	59,004	59,004			P236
NPDES Support Projects	N	Engineering	Stormwater	3	760,000	760,000	760,000			P174
Public Works Infrastructure Program	N	Highway	Transportation Network	3	2,103,000	3,448,000	3,448,000			P188
Traffic Improvements	P	Engineering	Transportation Network	3	50,000	50,000	50,000			P192
Energy Efficiency Upgrade Improvements	P	Various	Utilities	2	100,000	100,000	100,000			P109
TOTAL					8,088,635	8,433,635	8,433,635		1,000,000	
Sewer Enterprise										
Replace Unit 16 2014 Freightliner Box Truck	L	Sewer	Utilities	4	243,478	243,478	243,478			P236
TOTAL					243,478	243,478	243,478			
Water Enterprise										
Water Distribution System Improvements (Kingsbury Street - Oakland Ave to Webster)	N	Water	Utilities	3	508,500	508,500	508,500			P221
Water Distribution System Improvements (Oakland Ave - May Street to Highland)	N	Water	Utilities	3	350,000	350,000	350,000			P221
Replace Unit 21 2016 Ford F250 Truck	C	Water	Utilities	4	43,942	43,942	43,942			P236
Replace Unit 156 2011 Baker Robinson 10" Water Pump	L	Water	Utilities	4	101,518	101,518	101,518			P236
TOTAL					1,003,960	1,003,960	1,003,960			
FY2026 Grand Total					9,336,073	9,681,073	9,681,073		1,000,000	

FY2022 - FY2026 Tier I Capital Recommendations

Title	Code*	Department	Function	Cat*	Department Request	Recommended Tier 1	Cash	Debt	TBD	Page
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Code

B = Funding may be considered under the operating budget/special warrant article
 C = Core Fleet
 D = Recommendation is deferred or on hold pending other actions
 E = Emergency approval
 F = Funded appropriation outside the capital plan
 G = Request may not qualify as capital submission
 L = Specialized Fleet Equipment
 I = Project submission is incomplete or waiting additional information
 M = Submission has been modified from previous submission
 N = New submission with this CIP
 P = Project request has appeared in previous CIP's
 Q = Request does not qualify as a capital submission
 R = Request is a regularly occurring capital expense
 S = No recommendation; under study
 U = Urgent request based on identified conditions

Cat (Category)

1 = Equipment or Technology
 2 = Building or Facility
 3 = Infrastructure
 4 = Fleet
 5 = Extraordinary

Truck Classification

Class 1 = Smallest Pick-up Trucks 6,000 lbs.
 Class 2 = Full Size or 1/2 Ton Pick-up Trucks 6K to 10K lbs. (ex Ford F150 and F250)
 Class 3 = Heavy Duty Pick-up Trucks 10K to 14K lbs. (ex Ford F350)
 Class 4 = Medium Size Work Trucks 14K to 16K lbs. (ex Ford F450)
 Class 5 = Medium Job Trucks 16K to 19.5K lbs. (ex Ford F550)
 Class 6 = Medium to Large Trucks 19.5K to 26K (ex Ford F650)
 Class 7 = Heavy Duty Trucks 26K to 33K (ex Ford F750) Requires Class B Commercial
 Class 8 = Largest Heavy Duty Trucks 33K lbs. or more (specialized equipment)



**Select Board
TOWN OF NEEDHAM
AGENDA FACT SHEET**

MEETING DATE: 12/22/2020

Agenda Item	CPA Project Requests Review & Endorsement
Presenter(s)	Kate Fitzpatrick, Town Manager

1.	BRIEF DESCRIPTION OF TOPIC TO BE DISCUSSED
The Town Manager will review with the Board the eleven projects that have been submitted to the CPA for FY2022 funding and recommend that the Board endorse the applications for property under the jurisdiction of the Board.	
2.	VOTE REQUIRED BY SELECT BOARD
<i>Suggested Motion:</i> That the Board vote to endorse CPA funding applications for Town Hall Clock Restoration, Town Common Restoration and Beautification, Fisher Street Trailhead Construction, and Town Reservoir Sediment Removal.	
3.	BACK UP INFORMATION ATTACHED
(Describe backup below)	
a. Initial Eligibility Project Applications Forms (11)	

CPC USE ONLY:
Application # FY22-01
Qualifies: _____
Does not qualify: _____

INITIAL ELIGIBILITY PROJECT APPLICATION FORM

DUE BY DECEMBER 4, 2020

**TOWN OF NEEDHAM
COMMUNITY PRESERVATION COMMITTEE**

www.needhamma.gov/CPC

Email Applications to:

Carys Lustig and Kristen Wright:

clustig@needhamma.gov & kwright@needhamma.gov

1. **Applicant:** Needham Public Schools **Submission Date:** 11/16/2020
2. **Applicant's Address, Phone Number and Email:**
- Needham Public Schools
1330 Highland Avenue
Needham MA 02492
Contact Name: _____
3. **Purpose:**
(Please select all that apply)
- ☐ Open Space
☐ Community Housing
☒ Historic Preservation
☐ Recreation
4. **Project Name:** Emery Grover Renovation/ Addition Project - Option #3 (Rotated)
5. **Project Location/Address/Ownership (Control):**
1330 Highland Avenue, Needham MA 02492
Owned by: Town of Needham, School Committee
6. **Amount Requested:** \$1,475,130 (FY22)
7. **Estimated Total Project Cost (If Different):** \$\$27,095,258 (See attached)
8. **Critical Dates: (If Applicable)**
Schematic Design Appropriation May '21 ATM \$1,475,130
Town Vote to Fund Construction May '22 ATM \$26,380,128 (CPC Match Up to 49.2%)

- continued -

CPC USE ONLY:	
Application #	FY22-01
Qualifies:	_____
Does not qualify:	_____

Project Name: Emery Grover Renovation/ Addition Project - Option #3 (Rotated)

9. Project Summary: In 100 words or less provide a brief summary of the project:

The renovation of the Emery Grover School Administration Building at its present location, as described by BH+A Architects in the Emery Grover Feasibility Study (June 25, 2020.) This project includes the historic renovation of the building exterior, renovation and modernization of the interior, and the construction of a 30 foot, three story 18,415 GSF addition to the rear of the building. The orientation of the building would be rotated 90 degrees on the site to bring in natural light from the north, east and south walls. This project includes the temporary use of the Hillside Elementary School as swing space for school administration personnel during construction.

This project supports the Plan's historic preservation goal and meets all of the historic consideration factors: historic preservation, public benefit, restoration of functional use.

10. Community Need: In 100 words or less provide a brief statement of the need for and the benefits to the community.

Emery Grover is a building of historic significance to the Town of Needham. Constructed in 1897 as the Town's high school, it is the oldest public building in Needham and is listed in the National Register of Historic Places. Renovation of this historical landmark represents:

- * An opportunity to preserve an important piece of Town history.
- * An opportunity to preserve a Gateway Building into downtown.
- * An opportunity to engage in historic renovation of the Town Center.
- * One of few remaining opportunities for the historic preservation of a publicly-owned building.
- * The highest Historic Commission preservation priority.
- * A cost effective path to preservation - equal to demolition and a new building for current use.
- * The most assured path to historic preservation of this asset is a Town project; demolition likely if sold to a private developer.

Note: *This application enables the Community Preservation Committee to review the request to assess eligibility. You shall be notified by January 1 of your eligibility. If eligible you will be requested to supply additional information by February 1.*



Theodora K. Eaton, MMC
Town Clerk

TOWN OF NEEDHAM

Office of the Town Clerk

1471 Highland Avenue, Needham, MA 02492-0909

Telephone (781) 455-7500 x216

Fax (781) 449-1246

Email: Teaton@needhamma.gov

November 30, 2020

COMMUNITY PRESERVATION COMMITTEE
FUNDING REQUEST
2020/2021

Dear Members of the Community Preservation Commission:

The Town Clerk's office is requesting funding for a project to help preserve the Town's Marriage Records by improving the way these records are maintained and accessed. The project, more fully defined in the Statements of Work provided by the vendors who will be providing the services under State Contract, includes the scanning, indexing, and processing of more than 16,000 Marriage Records as well as the uploading of them into Laserfiche, a Content Management system used in more than 45 communities in Massachusetts and more than 35,000 around the country.

The goal of the project is to protect the historical significance of the records by minimizing the number of times these records which are in bound volumes are physically handled by the Town's staff. Since these records will be digitized the need to access the paper documents will be dramatically reduced. In addition, the software will enable immediate access to the records—which will help to ensure a higher level of customer care for those who need this information—by reducing the amount of time needed to fulfill this task. The Laserfiche software will enable the Town to enter new Marriage Records directly into the program as well as other Town documents—including Births and Death Records.

If the members of the Community Preservation Commission have questions or feel this is not an appropriate request for funding under the CPC guidelines, please let me know and I will try to seek funding through the annual Town Clerk's budget for FY2022.

Thank you for your consideration.

Sincerely,

Theodora K. Eaton, MMC
Town Clerk

CPC USE ONLY:	
Application #	FY22-02
Qualifies:	_____
Does not qualify:	_____

INITIAL ELIGIBILITY PROJECT APPLICATION FORM

DUE BY DECEMBER 4, 2020

TOWN OF NEEDHAM
COMMUNITY PRESERVATION COMMITTEE
www.needhamma.gov/CPC
 Email Applications to:
 Carys Lustig and Kristen Wright:
clustig@needhamma.gov & kwright@needhamma.gov

1. **Applicant:** Theodora K. Eaton, MMC, Town Clerk **Submission Date:** December 4, 2020

2. **Applicant's Address, Phone Number and Email:**

Town Clerk's Office - Town Hall
 (781) 455-7500 x 216
teaton@needhamma.gov
Contact Name:
 Theodora K. Eaton,
3. **Purpose:**
(Please select all that apply)
 - ☐ Open Space
 - ☐ Community Housing
 - ☒ Historic Preservation
 - ☐ Recreation

4. **Project Name:** Preservation of Town of Needham Marriage Records
5. **Project Location/Address/Ownership (Control):**

Town of Needham - under control of Town Clerk's Office
 Town Hall
 1471 Highland Avenue
 Needham, MA 02462
6. **Amount Requested:** \$ 25,000

7. **Estimated Total Project Cost (If Different):** \$

8. **Critical Dates: (If Applicable)**

- continued -

CPC USE ONLY:	
Application #	<u>FY22-02</u>
Qualifies:	_____
Does not qualify:	_____

Project Name: Preservation of Town of Needham Marriage Records

9. Project Summary: In 100 words or less provide a brief summary of the project:

The Town Clerk's Office has insured that all marriage certificates are preserved and bound since 1919, and has preserved the documents from 1711 to 1919 through Community Preservation funds.

This request is to scan and index the documents from the 1700's to 1970 (or later depending on the recommendation of the Needham Historical Commission), and upload onto a content management system. Companies under state contract will be contracted for this work, and an estimate has been received from one of the potential firms.

The Town Clerk has sought a recommendation from Needham Historic Commission Chair to review the historic significance of these documents.

10. Community Need: In 100 words or less provide a brief statement of the need for and the benefits to the community.

Though the marriage documents are bound and kept in the Town Clerk's vault at Town Hall, there is still danger to the preservation through the physical handling by Town staff, as well as the possibility of fire or flood. This project protects the historically significant documents.

The software will enable immediate access to the records which will help ensure a higher level of customer care for those who need the legal documents, reducing the amount of time needed to fulfill this task. The new software will allow staff to enter marriage records directly into the system.

Note: *This application enables the Community Preservation Committee to review the request to assess eligibility. You shall be notified by January 1 of your eligibility. If eligible you will be requested to supply additional information by February 1.*

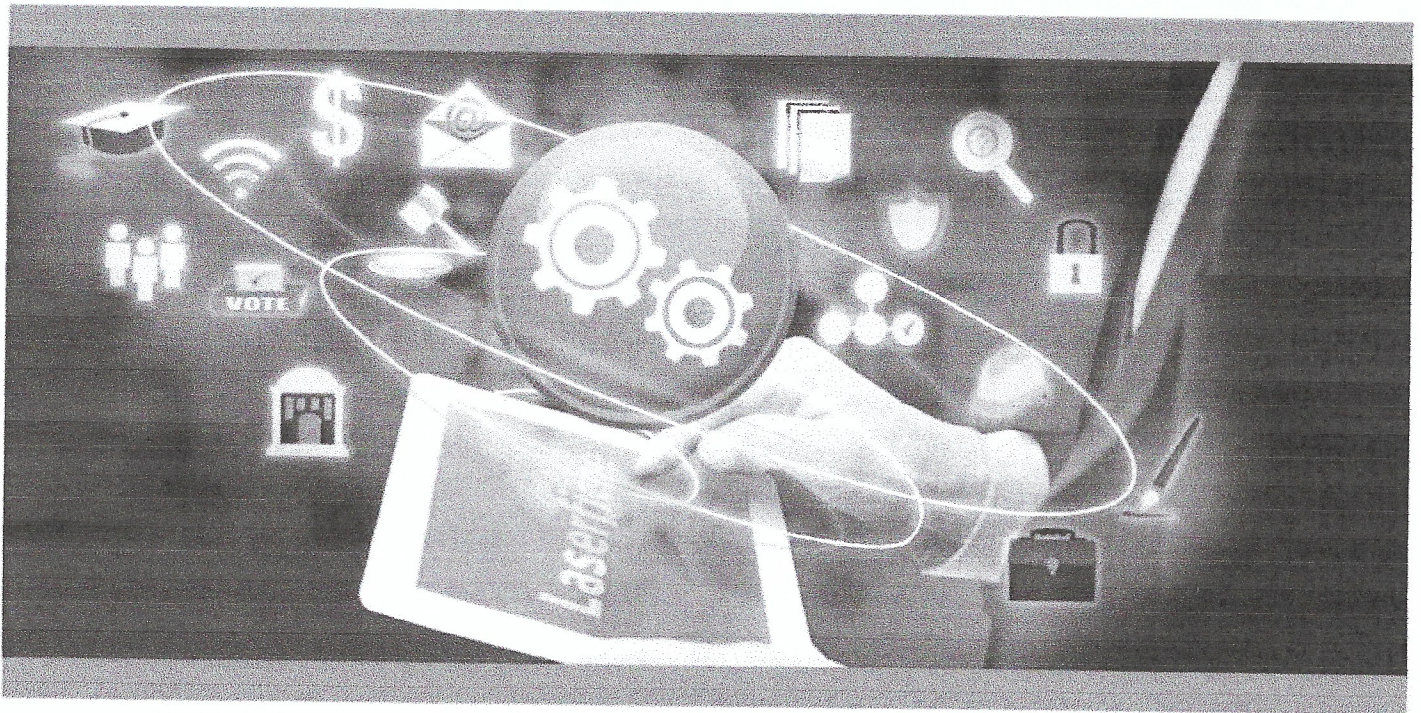
Town of Needham

Norfolk County

Enterprise Content Management System

November 20, 2020

Valid for 3 months



Bruce Cadman
Director of Sales

518-441-6496

BCadman@generalcode.com

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INTRODUCTION

RECOMMENDED SOLUTION

Based on the Town's current needs and looking to the Town's potential future uses of electronic content management, General Code recommends implementation of Laserfiche Avante.

Laserfiche Avante is a robust system that provides the flexibility to configure the system to your specific way of doing business without your having to "shoehorn" your processes to fit the mandates of a software solution. Laserfiche is also easily expanded – to different departments, different types of documents, and many other users in the future as you see other uses.

ABOUT GENERAL CODE

General Code provides a variety of information management solutions to more than 2,700 local governments, educational and commercial organizations throughout the United States. We set the standard for improving document management processes and are on the cutting edge of technology, providing new and reliable tools to our customers to better serve their clients. We pride ourselves in our level of experience, our technical knowledge in the industry and our focus on the customer.

General Code is a top 5 government reseller of Laserfiche in the United States, offering more than 14 years of experience, coupled with an industry-leading service, integration, training and helpdesk team.

With Laserfiche at the center of your Enterprise Content Management Solution, you get what nearly 30,000 other public and private organizations are already getting – the most powerful combination of electronic capture, storage and business process automation tools available today. We selected Laserfiche as our technology platform because of its open architecture, integration capabilities and the capacity to scale up as your demand for information sharing and access grows.

Every system designed and implemented by General Code fits your specific needs and requirements. Configuration of your Enterprise Content Management Solution to your situation reduces the time and additional resources required to "adjust" or "optimize" a one-dimensional system.

As a values-based company we adhere to the principles outlined in our "General Code." These guides for conduct are integral to building a comprehensive content management solution – one that leverages our 50+ years of service to public organizations and governments of all sizes.

Elements of our "code":

Digital information must be designed and implemented in ways that support the success of the entire organization.

Our content management solutions must run on a platform that we believe in.

The quality of our service and support determines the ultimate value of the solution we develop.

Our content management solutions are based on the practical—if there is a better way to do something we will design and implement it.

LASERFICHE AVANTE SYSTEM OVERVIEW

Today, successful organizations need more than document management; they need to optimize the decision-making process by getting the right content – whether structured or unstructured, paper or electronic, audio or video, photograph or e-mail – into the right hands at the right time.

Laserfiche Avante is a cutting-edge solution that combines comprehensive content management functionality with business process management (BPM) tools to both manage and process information – turning it into an asset that enables efficiency and smart decision making organization-wide. Laserfiche Avante provides all of the elements for today's comprehensive needs:

- **Document Imaging** – Converts paper documents or film into an electronic or digital format.
- **Document Management** – Manages documents (physical or digital) through their lifecycles.
- **Business Process Management** – Applies workflow technology to content-related processes in order to standardize and optimize them.
- **Integrative Middleware** – Provides many ways to interface with other business-specific applications to enable you to have one document repository that can be accessed from other applications and to enable “sharing” of data between other applications and Laserfiche.

The Laserfiche workflow engine gives you a platform to map, model and manage your business processes in order to obtain a better understanding of how to achieve your overall goals by:

- **Increasing productivity** by automating manual, repetitive processes.
- **Modeling, executing and managing business processes without writing code.**
- **Triggering workflows based on actions taken in Laserfiche or in 3rd party applications, such as CRM, GIS, ERP and more.**

Laserfiche Avante readily fits into your existing networked environment, without requiring custom programming or extensive hardware and software updates. Laserfiche is developed to support close integration with industry-standard operating systems and database management systems. See specifications in Appendix A for more detail.

Technology represents one of the most significant investments you make in your organization's success, and General Code and Laserfiche are committed to providing a comprehensive framework for delivering value quickly, easily and without the need to bring in expensive experts at every turn. General Code has seasoned professionals to guide you through the planning and implementation process and will be there to provide on-going support.

PRELIMINARY DOCUMENT MANAGEMENT PROJECT PLAN

- I. Upon finalization of the agreement, General Code's Project Manager will call you to review the Project Plan and discuss the following:
 - Designate the main contacts for the project from General Code and your organization
 - Discuss the proposed schedule and set dates
 - Determine any necessary hardware purchases, installation or configuration that must take place prior to the system installation, and set a date for completion of that work
 - Confirm availability of required personnel, equipment and facilities
 - Address any outstanding questions, concerns or issues
- II. The Initial Design and System Implementation Phase will include the following:
 - Installation and configuration of the main server components
 - Installation and configuration of the named user licenses, including Laserfiche client software, Snapshot Plug-In and E-mail functionality, as well as scanner configuration and testing, if applicable
 - Complete system testing of all installed components
 - A file structure review and creation of a hierarchical tree structure designed to maximize efficient use of the document management system
 - Discussion of file-naming conventions to be used in the document management system
 - Establishment of an initial set of templates (electronic index cards)
 - Configuration of users, groups and user rights (security)
 - Training for users
 - Administrator training for up to two (2) people who will be responsible for administration of the system

DESCRIPTION OF RECOMMENDED COMPONENTS

Laserfiche Avante™ Server Software	Laserfiche Avante MS SQL Express server software is a complete electronic content management solution with fully integrated business process management. Laserfiche Avante includes the Laserfiche Automated Workflow Module and other important business-process functionality “baked into” the core software. The Laserfiche Automated Workflow Module is a robust component that facilitates the flow of documents, auto-files and auto-names folders and documents and enforces time schedules, where desired, by providing e-mail reminders or notifications to backups or supervisors or by re-assigning documents to others’ folders. By automating processes, you can ensure that proper process is followed, and work can be distributed to users in an orderly and predetermined manner. Laserfiche’s robust security enables you to limit both access and functional rights of users. Your IT staff will appreciate the ability to set security by user or group, as well as the option to use Windows Authentication for single log-in. System administrators have access to the Laserfiche Administrator Console either in a client or a web format.
Named Users	Laserfiche named users have the ability to utilize all of the features of the software, including scanning, importing, file and volume management, search and retrieval, annotations, e-mail routing and workflow participation, as applicable and as security rights permit. Additional named user licensees can be added at any time, in any increment. SnapShot Functionality: The SnapShot functionality allows designated users the ability to “print” existing electronic files into the Laserfiche system directly and automatically convert them to Inalterable Laserfiche images rather than having to print them out and then scan them into the system. E-Mail Functionality: The E-Mail Plug-in allows users to send Laserfiche documents as e-mail attachments to anyone using a MAPI-compatible E-mail system. All or part of a document can be e-mailed; multiple files can be “zipped” into one e-mail; and you can choose the format in which the documents will be sent (e.g., PDF, TIFF, JPEG, etc.). Web Access: Laserfiche Web Access is a browser-based thin client offering virtually all of the document management capabilities of the thick client interface. Authorized users organization-wide can simultaneously access documents, whether they are accessing Laserfiche from their desks or a remote location. IT can add new

	users without installing software on individual workstations. Users access Laserfiche through a Web browser. Authorized users scan, index and otherwise manage documents with Web Access. Staff can also search, retrieve, create, move, rename and annotate documents from the Web, as well as participate in workflow processes. Web Access has real-time access to the Laserfiche repository, which means that information input into Laserfiche is instantly available to all users, whether connected directly to your server, or using Web Access. Also included with Web Access is the Laserfiche SharePoint integration. Laserfiche was the first electronic records management solution to obtain joint Department of Defense records management certification with SharePoint. Laserfiche Web Access also provides real-time access to your Laserfiche repository through the use of mobile devices. The Laserfiche iPad and iPhone apps provide impressive access, and Web Access Light is very useful for other tablets and mobile phones. Laserfiche mobile and Web Access Light are included with Web Access. Laserfiche Mobile/App is an app that lets you capture, upload, and securely access and work with documents in and outside your Laserfiche repository while on the go. You can review and submit forms from the app as well. You can browse for documents in a folder structure; search the entire repository or a specific folder; create, copy, move, rename, sign, download, print, and delete documents; modify document fields; view annotations; submit and approve forms; view and work with offline documents and forms; and start and view business processes. Additionally, you can add documents to your repository from other apps, the mobile device's gallery, or its camera. Gallery and camera images can be processed and enhanced for easier viewing. Laserfiche Forms Essentials comes with all Laserfiche Rio and Avante 10.2.1 installations and upgrades. All full named users can sign in to Laserfiche Forms, submit forms, access tasks, and perform any other action in Laserfiche Forms that their Laserfiche Forms security settings allow them (e.g., creating or administering business processes). These users are automatically retrieved from the Laserfiche Server and are managed on the System Security page in Laserfiche Forms. Forms Essentials Full Users have access to the core features necessary to design processes and forms. Essential Users also have access to the Operational Dashboard where they can view statistics on process in progress.
Laserfiche Forms Automation*	Laserfiche understands that forms are a key component of many organizational business processes. If the base ECM application is considered

<i>*limited to installation on one server</i> <i>optional</i>	the "engine," many consider automated forms the "transmission" that drives paperless business processes. Therefore, Laserfiche has designed forms automation solutions to help you integrate this key element into your overall ECM strategy: • PDF Forms Automation through Laserfiche Workflow. Built into the core Laserfiche Workflow are activities specifically designed around automating PDF forms. Some of these workflow/process activities include: retrieving values from a PDF form and storing them as tokens; pre-filling portions of a PDF form; verify PDF signatures, and more. • Laserfiche Forms Professional is a product that provides a solution for organizations to build web forms and manage their business processes. Laserfiche Forms has a drag and drop graphic user interface which allows business users to easily model their processes and design the forms associated with the process. The web based application provides out-of-the-box integration with the Laserfiche ECM suite, as well as the ability to automate complicated processes and integrate with external systems. You can set security levels to designate administrators or users for each process. Also, you can assign a form to a specific user or group, making team collaboration easy and secure. • Forms Portal expands the functionality in Laserfiche Forms to include publicly available forms that users can fill out anonymously. Without Forms Portal, users must sign in before filling out any forms. Forms Portal is licensed per instance, meaning you have a separate Forms Portal activation key in addition to your standard Forms activation key. If you have the Forms Portal, anybody can submit a form. Public users do not need to sign in to Forms or have a Laserfiche account.
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INVESTMENT DETAIL & OPTIONS

Hardware or any applicable taxes are not included in price, unless otherwise noted.

Line Item Description	Model #	Quantity	Unit Price	Total
Base Software				
Avante Server for SQL Express with Workflow	MSE10	1	\$1,500.00	\$1,500.00
Avante Named Full User with Snapshot, Web Access & Email	MNF16	10	\$600.00	\$6,000.00
Base Software Subtotal				\$7,500.00
Support				
LSAP Avante Server for SQL Express with Workflow	MSE10B	1	\$300.00	\$300.00
LSAP Avante Named Full User with Snapshot, Web Access & Email	MNF16B	10	\$120.00	\$1,200.00
Support Subtotal				\$1,500.00
Professional Services				
Laserfiche Install and Training On-Site Days		1.5	\$1,650.00	\$2,475.00
Laserfiche Project Management		1	\$300.00	\$300.00
Remote Services		1	\$500.00	\$500.00
Professional Services Subtotal				\$3,275.00
Grand Total				\$12,275.00

Anticipated annual LSAP fees after the included 1st year for the above configuration would be \$1,500.00

Note: This estimate is subject to change based upon the then-current support prices for that year.

Automated Workflow Module and Electronic Forms (software) is included with Laserfiche Avante. If/when the client wishes to implement Automated Workflow and Electronic Forms, there will be additional development, configuration and training time required. We will be happy to assess any Workflow implementation desires with you and provide any relevant fees at your request. (Fees will be based on the number and complexity of the desired workflows to be implemented.) These additional service fees would not apply until you are ready to implement this component.

Optional Components:

OPTIONAL COMPONENTS				
Add-Ons/Plug-Ins				
Avante Forms Portal Add-on	MPFRM	1	\$7,995.00	\$7,995.00
LSAP Avante Forms Portal Add-on	MPFRMB	1	\$1,599.00	\$1,599.00
Item Subtotal				\$9,594.00
Avante Forms	MFRM16	10	\$50.00	\$500.00
LSAP Avante Forms	MFRM16B	10	\$10.00	\$100.00
Item Subtotal				\$600.00
Public Access to Records				
GC Streamline Public Records Access Business Process Automation		1	\$7,370.00	\$7,370.00
Item Subtotal				\$7,370.00
SAP GC Streamline Public Records Access Business Process Automation	GCSL1_SAP	1	\$749.00	\$749.00
Item Subtotal				\$749.00

1. Adjustments to Performance Schedule; Rescheduling.

Adjustments to Schedule. Upon the mutual consent of the Town and General Code, the "Performance Schedule" may be changed or extended as outlined below.

Rescheduling. The Town must notify General Code, in writing, immediately upon learning or otherwise becoming aware, of any difficulties that may delay the delivery of services or deliverables. Such notification must identify the reason for the delay, as well as the anticipated period of delay.

Travel-related penalties incurred by General Code due to a change in the Installation / Training schedule by the Town may be charged directly to the Town unless the delay is a result of a state of emergency.

2. Contract Cancellation Policy.

If the Town chooses to cancel this contract, it must do so in writing. The Town will be billed for the following contract-related expenses incurred and services provided up to the receipt of written contract cancellation, including:

- Any and all travel-related expenses incurred by General Code,
- Any and all consultation, installation and training services performed by General Code,
- Any and all software-related expenses incurred by General Code as per the Laserfiche Software Return Policy.

3. Laserfiche Software Return Policy:

- Unopened and not activated products can be returned within 30 days from the date of purchase at no charge.*
- Unopened and not activated products returned between 31 days to 120 days from the date of purchase will incur a 15% restocking fee on the original purchase price.*
- There is no return of products over 120 days from the date of purchase.
- There is no return of products that have been opened or activated.

**Return Credit, less applicable charges, will only be given after Laserfiche receives a letter of confirmation that the software was not opened or activated.*

SOFTWARE ORDER, PAYMENT AND PERFORMANCE SCHEDULE

All software components will be ordered approximately three weeks prior to installation and shipped to customer. The software maintenance (annual support) will start 30 days after software order.

- \$9,000.00 of the project price shall be invoiced upon the order of the software and support
- \$3,275.00 of the project price shall be invoiced upon completion of the installation and training.

(Client please fill out) **Invoice for this Project to be sent to:**

Department: _____ **Contact Name:** _____

TOWN OF NEEDHAM, NORFOLK COUNTY, MASSACHUSETTS

By: _____ **In the Presence of:** _____

Title: _____ **Title:** _____

Date: _____ **Date:** _____

GENERAL CODE, CMS, LLC

By: _____ **In the Presence of:** _____

Title: _____ **Title:** _____

Date: _____ **Date:** _____

In order to authorize the project:

1. **Sign the Proposal**
2. **Fax or email the Authorization & Agreement Section only to: ICCCDS@generalcode.com • fax (585) 328-8189**
3. **Mail the signed Proposal to General Code at: 781 Elmgrove Road • Rochester, NY 14624**

Upon request General Code can sign and mail a copy of this agreement back to the Municipality for its records.

AUTHORIZATION & AGREEMENT

The Town of Needham, Massachusetts hereby agrees to the procedures outlined above, to General Code's Content Management Solutions Terms & Conditions and to the License Agreements for the software referred to above, all of which are available at <http://cms.generalcode.com/terms-conditions>, and are incorporated herein by reference, and authorizes General Code to proceed with the project.

Electronic Document Management Project

\$12,275.00

Estimated Annual support fee second year forward (LSAP): \$1,500.00

Note: This estimate is subject to change based upon the then-current support prices for that year.

Optional Components: Please check any optional component to be included:

- ☐ **State Contract Option (for the base project):** **\$613.75**
(For any options added to the base project, add 5% surcharge for State Contract option.)

Please process this agreement through a State Contract Option

Procurement of this contract will utilize a service for pricing and payment terms only. Upon receipt of General Code's signed agreement, a formal quote will be issued by servicing organization to the Town. The Town will issue a P.O. to said servicing organization, and all invoicing and payments will be conducted between this servicing organization and the Town. Delivery of products, installation, training and support will be conducted by General Code.

PLEASE NOTE:

If this option is not selected and included below, the Town is solely responsible for soliciting and obtaining respective quote(s) directly from the State Contract Vendors and providing General Code with a Purchase Order. If General Code is required to become involved in said solicitation process, an appropriate service fee will be imposed via Change Order.

- ☐ **Laserfiche Avante Forms Professional** **\$600.00**
LSAP (Second year forward): \$100.00
- ☐ **Laserfiche Avante Forms Portal (allows for Public Access)** **\$9,594.00**
LSAP (Second year forward): \$1,599.00
- ☐ **GC Streamline for Records Access** **\$8,119.00**
LSAP (Second year forward): \$749.00

Note: Forms and Forms Portal are required to implement the GC Streamline Records Access process

Electronic Document Management Solution:	\$12,275.00
Optional Component(s), if selected:	+ \$
Estimated Total Investment:	\$

APPENDIX B – INSTALLATION, TRAINING AND SUPPORT

Pre-Installation Teleconference and Technical Review

Prior to the on-site installation and training, one of General Code's technicians will work with your technical staff or consultant to review the hardware and other technical requirements and ensure that all hardware is ready for the installation. We will also work with your designated contact person to establish the agenda for the on-site days.

Customized, Hands-On Training

General Code provides practical hands-on training sessions to ensure that your users keep pace with "best practices" and that your Laserfiche system continues to provide your organization with the maximum efficiencies possible. Our training experts will come on-site to your facility and provide thorough training for your staff with manuals customized to your specific system and needs. Whether you are a new Laserfiche user or an existing user seeking refresher training, we pride ourselves on maintaining a team of trainers who can relate to users at any level of expertise.

Our standard Laserfiche user training covers the basic functions of the program and provides you with the necessary skills to put the system into immediate use. Based on the file organization and file naming structures that were determined by your organization, the training covers input, search and manipulation features using your documents to address file-organization and file-naming structures

Administrator Training covers the system administrative functions and typically takes place throughout the on-site sessions, as appropriate.

Laserfiche Software Assurance Plan (LSAP)

LSAP is renewable on an annual basis and was created to deliver critical program updates and provide on-going technical support for your Laserfiche document management system. With LSAP you will always be confident that you are receiving the very best performance and quality possible.

TECHNICAL SUPPORT

Technical Support covers all questions that might arise with your Laserfiche system should a technical issue arise. Technical Support covers the installation of software patches and minor upgrades, as appropriate.

The first line of technical support is via telephone, using our toll-free number (855-436-5500) or via e-mail at lfsupport@generalcode.com. With Basic LSAP service, technical support requests not immediately addressed will be acknowledged within 8 business hours, with the majority of response times within 2 hours. General Code's support technician will discuss the issue with you. If there are more detailed diagnostics needed, the technician will log into your system remotely, using the Internet. In this way, the technician can see what the user is seeing, do diagnostics, and generally remedy the situation remotely during this initial contact. In situations that require additional research or work by the technician, we will let you know what still needs to be done, along with a timeframe for getting back to you. You will also receive a Case number for future reference. By

APPENDIX A – RECOMMENDED SERVER/WORKSTATION SPECIFICATIONS

Please click on the below links to view current specifications:

[Laserfiche Avante Minimum Recommended Hardware Specs](#)

[Laserfiche Default Ports](#)

[Virtualization Considerations for Laserfiche](#)

providing remote diagnostics and remediation to our clients, we can provide you with quick resolution of your issues to keep you up and running.

SOFTWARE PATCHES AND UPGRADES:

In addition to receiving technical support, customers with a current LSAP contract will receive **critical program updates within the current version of Laserfiche**. This is extremely important because Laserfiche is continuously improved to be even more powerful and efficient. You will receive routine system updates released by the manufacturer after a period of additional General Code in-house testing, as applicable. These patches and software upgrades are available for download at our FTP site. Customers are given the option of applying the patches themselves or having one of our Laserfiche technicians apply the patch remotely.

There is no additional cost for the installation of minor software updates or patches (typically called 'point releases'). Major software updates (typically called 'version releases') may have associated service charges to install, upgrade, or to migrate your Laserfiche software to the new major release level. Related training on new functionality of the upgraded software may also have associated service charges. Any additional charges will be outlined and quoted to you in advance.

LASERFICHE OFF-HOURS SYSTEMS UPGRADES:

At times it is a requirement that Laserfiche systems upgrades are done during off hours or over the weekend to minimize operational interruptions. General Code is happy to work with our customers to accommodate these requirements. With changes in the law regarding payment of overtime for non-exempt helpdesk staff that are involved in doing work after hours or over the weekend, they must be paid overtime. General Code is going to begin charging a nominal fee for the off-hours work to cover this new expense. The charge will not exceed \$500.00 for the time involved.

Services covered under LSAP:

- Remote troubleshooting and repair to the best of our ability of any errors generated by Laserfiche
- Remote troubleshooting and repair to the best of our ability any Laserfiche functionality that is not working
- Provide and remotely apply minor patches/point releases on an as needed basis
- Respond to request calls within 8 business hours, if not immediately
- Provide technical support between the hours of 8:00 AM - 5:00 PM EST
- Provide access to all major and minor patches provided by Compulink Laserfiche
- Access to TIPS and FAQs on the General Code website
- User group meetings
- Access to Laserfiche's knowledgebase
- Regular newsletters - Laserfiche & The Decoder
- Access to webinars

Services not covered under LSAP:

- Training - New user or refresher training - either on-site or remote
- Repair of damaged databases
- Establishment of SQL maintenance plan
- Addition of custom features or functionality to the software
- Support or troubleshooting of third party software
- Faults or problems caused by unauthorized access to configuration information or changes to components by the user or a third party.
- Installation, Migration, Upgrading of software related to major software releases
- Problems or faults caused by use of the product outside its normal operating conditions.
- On-site technical support, unless it is specifically included as part of the selected Agreement or funded by the Customer on a per-day basis as part of a signed Change Order.
- On-site consulting or training, unless it is specifically included as part of the selected Agreement or funded by the Customer on a per-day basis as part of a signed Change Order.

Customer's Obligation:

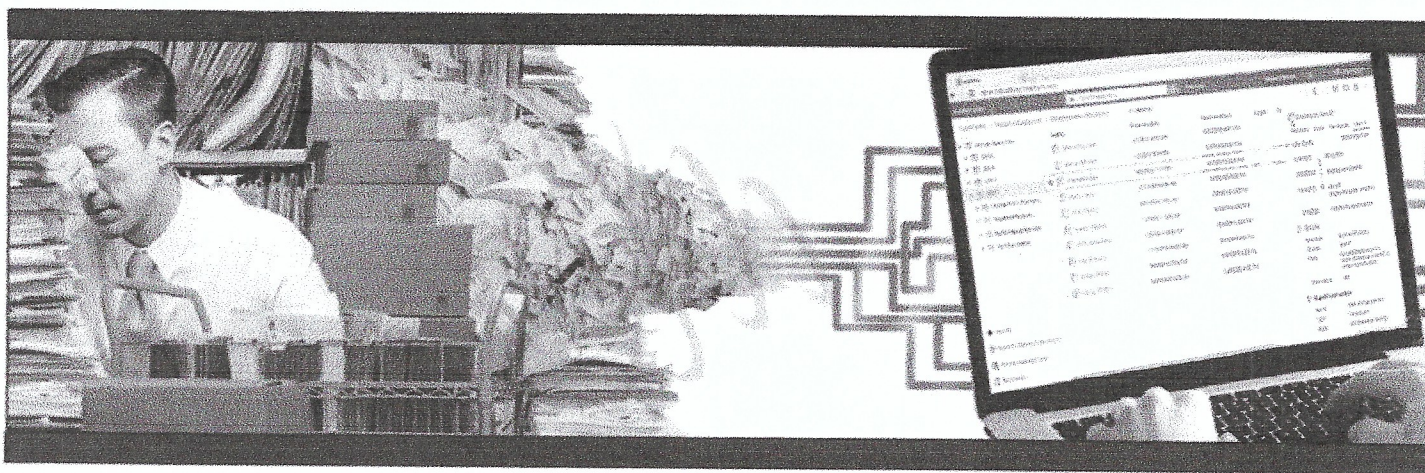
- To maintain appropriate backups of the Laserfiche database and associated files.
- To contact General Code prior to implementing significant network changes that has the potential to impact the Laserfiche system. Some examples are, operating system changes on either the server or PC, replacement of existing PCs or server(s), and changes in network configurations, such as server name, IP address or workgroup on PCs.
- To have Internet access on the Laserfiche server and all workstations where the Laserfiche client is installed and be willing to allow our Support Technicians remote access to the Customer's Laserfiche system via GoToAssist or other acceptable remote access tool.
- To designate an IT contact and to provide the name, phone number and e-mail address on the registration form.
- To describe technical issues completely in order to provide General Code's Support Technician sufficient information to be able to diagnose and reproduce the problem, including any identified error codes.

Town of Needham, MA

Marriage Books

November 23, 2020

Valid until 12-31-2020



Document Management Solution

Scanned Image Indexing and Processing Services

Bruce Cadman
Director of Sales
518-441-6496

BCadman@generalcode.com

DOCUMENT CONVERSION / PROJECT DELIVERABLES / INVESTMENT DETAIL

DOCUMENT CONVERSION PROJECT

Reference is made to the Document Scanning Proposal between Image Data Inc and Saratoga County, NY.

PROJECT DELIVERABLES

The following deliverables are included in your project pricing. As we do not have the proposal from our vendor partner, Image Data Inc, this price is based solely on the information /assumptions as set forth below.

- The document conversion services associated with the project will be performed by Image Data Inc.
- Upon completion of the scanning and indexing portion of the project by Image Data Inc, Image Data Inc will upload the image files to General Code.
- Once received from Image Data Inc, General Code will process the images and index data into Laserfiche Viewer format and upload same onto Laserfiche system, if owned.
- General Code is not responsible for the accuracy and quality of the images (e.g., black borders, skewed images, blurry images, non-legible images, etc.), index data or other errors on the scanning portion provided to General Code by Image Data Inc.
- One (1) copy of the Laserfiche Viewer formatted documents will be provided on removable media.

PROJECT MANAGEMENT AND OTHER SERVICES

- Our charge includes project management and assumes that all the documents contained in this project will be imaged and provided by Image Data Inc to General Code.
- Project Management will include job setup, creation of file structures and databases (as applicable) and Laserfiche Viewer containing images and data on removable media.
- Placement of the shipped documents in your repository will be performed as a courtesy service upon request.
- To schedule the placement of the documents, please contact Mike Rizzo at 855-GEN-CODE.

INVESTMENT DETAIL

Our price is based upon the information set forth above and is valid until 12-31-2020.

Town of Needham, MA - Marriage Books				
	Est. of Images	Est. of Documents	Unit Price	Extended Price
Document Keying/Indexing on selected documents for population of template fields, creation of document naming and folder structure.		93	n/a	n/a
Data Processing/Upload services on all records into Laserfiche, including applying templates and indexing to images, file naming and folder structure creation.	16,275		Flat Charge	\$ 700.00
OCR of Documents: Utilizing OCR processing on all documents to extract type-written text. OCR will only identify type-written characters printed from left-to-right on the page.	16,275		\$ 0.006	\$ 97.65
Delivery Fee per delivery for processing, copying, delivery and upload of backfile documents.		1	\$ 300.000	\$ 300.00
Project Management and other related services including job setup, creation of file structures and database (as applicable) and Laserfiche viewer containing images and data on removable media.				Included in per-image price
Total Indexing, Processing/Upload Pricing:				\$ 1,097.65

Document Indexing/Processing Specifications

Document Type / Description		Est. of images	Est. of Documents
Minute Books (93 Bound & Unbound)		16,275	93
Index Field(s)/Keying	Title		
Who is Keying/Indexing	Image Data		
Document Naming Convention	Title		
Document Organization (Folders)	Town Clerk/Vital Records/Marriages/Books/file		
Microfilm needed?	No		
Comments / Special Instructions			

AUTHORIZATION & AGREEMENT

Town of Needham, MA hereby agrees to the procedures outlined above, to General Code's Document Management Solution Terms & Conditions which are available at <http://cms.generalcode.com/terms-conditions> and are incorporated herein by reference as they apply to this proposal, and authorizes General Code to proceed with the project.

Processing/Uploading of Scanned Images into Laserfiche: \$1,097.65
SHI Option estimate an additional 6% \$65.86

Payment Schedule:

General Code will invoice for processing services upon shipment of each batch of the scanned documents.

Performance Schedule:

The project will be completed within 90 days of General Code's receipt from Image Data Inc of all materials necessary to complete the project.

(Client please fill out) Invoice for this Project to be sent to:

Department: _____ Contact Name: _____

TOWN OF NEEDHAM, MA

By: _____ In the Presence of: _____

Title: _____ Title: _____

Date: _____ Date: _____

GENERAL CODE, CMS, LLC

By: _____ In the Presence of: _____

Title: _____ Title: _____

Date: _____ Date: _____

In order to authorize the project:

1. Sign the Proposal
2. Fax or email the Authorization & Agreement Section only to: ICCCDS@generalcode.com • fax (585) 328-8189
3. Mail the signed Proposal to General Code at: 781 Elmgrave Road • Rochester, NY 14624

Town of Needham, MA

Upon request, General Code can mail a signed copy of this agreement back to the Municipality for its records.



**Document Scanning Proposal
For
Town of Needham, MA**

Submitted: November 20, 2020

**Submitted By: Laurie Green
Senior Account Executive
Image Data, Inc.
(518) 862-2740
lgreen@imgdata.com**

Statement of Services

Scope of Work

1.0 OBJECTIVE

The objective of this proposal is to provide preparation and book scanning for the Town of Needham's Marriage Books. The project will be converted in our Albany, New York production facility according to the requirements detailed in this Statement of Work.

Image Data Team will work closely with the designated representatives from the Town of Needham throughout the term of this project to provide for a smooth, timely, confidential and successful partnership.

2.0 SUMMARY OF CONTENTS

The following sections are included in this SOW:

- Production Contacts
- Pickup and Delivery
- Conversion Services
- Transmission of Images
- Post Scan Indexing
- Delivery and File Back-up
- Facility, Production and QC Overview
- Pricing Schedules

3.0 PRODUCTION CONTACTS

The conversion will be managed by a team consisting of the following Image Data individuals, who will be responsible for completion of production activities.

- | | |
|---|--------------------------|
| 1. Kara Heniges
(518) 862-2740 ext. 1030 | Operations Manager |
| 2. Ken Major
(518) 862-2740 ext. 1023 | Director of IT |
| 3. Laurie Green
(518) 862-2740 ext. 1021 | Senior Account Executive |

4.0 PROJECT PICKUP AND DELIVERY SCHEDULES

The Town of Needham will box all records for pick-up by driver and delivery to Image Data's production facility in Albany, or for shipment to Image Data. Shipment method, dates, schedules and volume of boxes to be determined.

Based upon the supplied image volumes, Image Data anticipates the production time on a typical pick-up to be 60 to 90 days from the date of pick-up.

5.0 DOCUMENT PREPARATION

Document preparation will be needed to remove staples, paperclips, sticky notes and documents from books prior to scanning and will be completed by IDI.

6.0 CONVERSION SERVICES

Documents will be scanned at 300 DPI to black and white, TIFF images. Image Data will provide a POC of the images and directory formats for approval by the Town of Needham prior to entering into production.

- Books are a mix of bound and un-bound
- Total of 93 books
- For bound books, do not cut spine
- 8 books have pages in plastic sleeves
- Do not scan attachments
- Nothing larger than 11x14
- Capture fronts only of pages, do not scan backs regardless of content
- All pages in plastic will be scanned in the plastic sleeve- (the images will be completely legible but may affect image sharpness)

Image Data is not able to improve the quality of a poor original. If poor quality originals are found, a "Best Image Available" document may be scanned prior to the original imaged document.

7.0 TRANSMISSION OF IMAGES

Data will be transmitted to General Code for upload into Laserfiche software. NOTE: Load fees into LF are not included in this proposal and will be provided separately by General Code.

8.0 POST-SCANNING INDEXING & ORGANIZING

IDI will index the images as follows:

- Title on front or spine of book

9.0 DELIVERY & FILE BACK-UP

Once the file organization naming and indexing is complete your electronic records are ready to be delivered to the Town. The files may be brought into your existing Laserfiche system or you can store the records on the provided Laserfiche Viewer

10.0 IMAGE RETRIEVALS DURING PRODUCTION

While the Records are at Image Data during production, a process will be determined for easy access to the images when requested. Requests by Authorized Representatives from the Town of Yorktown can be made via email and delivered via email, FTP, FedEx or UPS. The cost to would be \$17.00 per retrieval plus the imaging fee.

Retrieval: One record pulled from one file = one retrieval. All FedEx, USPS, UPS, or other ground service costs incurred are not part of this pricing structure and will be billed accordingly.

11.0 SERVICE LEVEL AND RETENTION

Documents will be returned to the Town of Needham once scanning is complete.

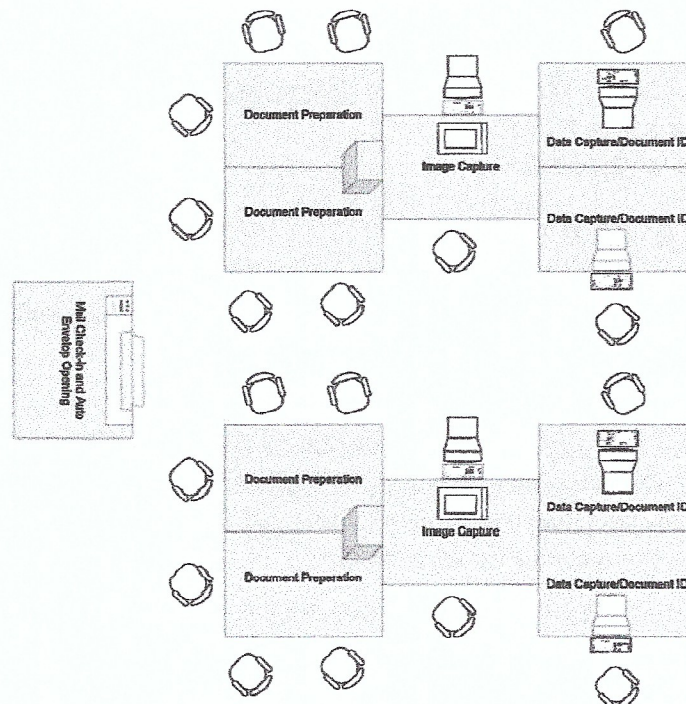
12.0 PRODUCTION AND QUALITY CONTROL (QC) OVERVIEW

Lean Sigma Cells

All IMAGE DATA centers operate in a Lean Sigma Cell design. This design ensures efficiency by eliminating delays in any work queue. Work is not stacked or bottlenecked with the possibility that errors may be contained in an over produced work station. With this workflow design, all elements are synchronized to maximize a daily throughput rate by balancing and managing workloads at each station of the cell. The error prone design of separating prep/imaging/index/document identification within different areas of the room is not utilized by Team IMAGE DATA. Errors are virtually eliminated by employees working side-by-side to ensure that process or product deficiencies are reported to the previous station. This flow enables the Lean Cell to find and correct deficiencies instantly, ensuring that the correction is made at the time of occurrence. In addition, our Lean Sigma work cells process the information in smaller batches, resulting in faster net throughput times. Fast processing times promote the turnaround times required and ensures quality assurance checks continue to be completed in conjunction with deliverable times. Team IMAGE DATA will create a lean cell for each unique task order under this agreement.

Lean Sigma continuously improves overall production and eliminates errors resulting in providing the Town of Needham higher quality images and data with the highest accuracy levels and at the same time lowering overall costs to our clients.

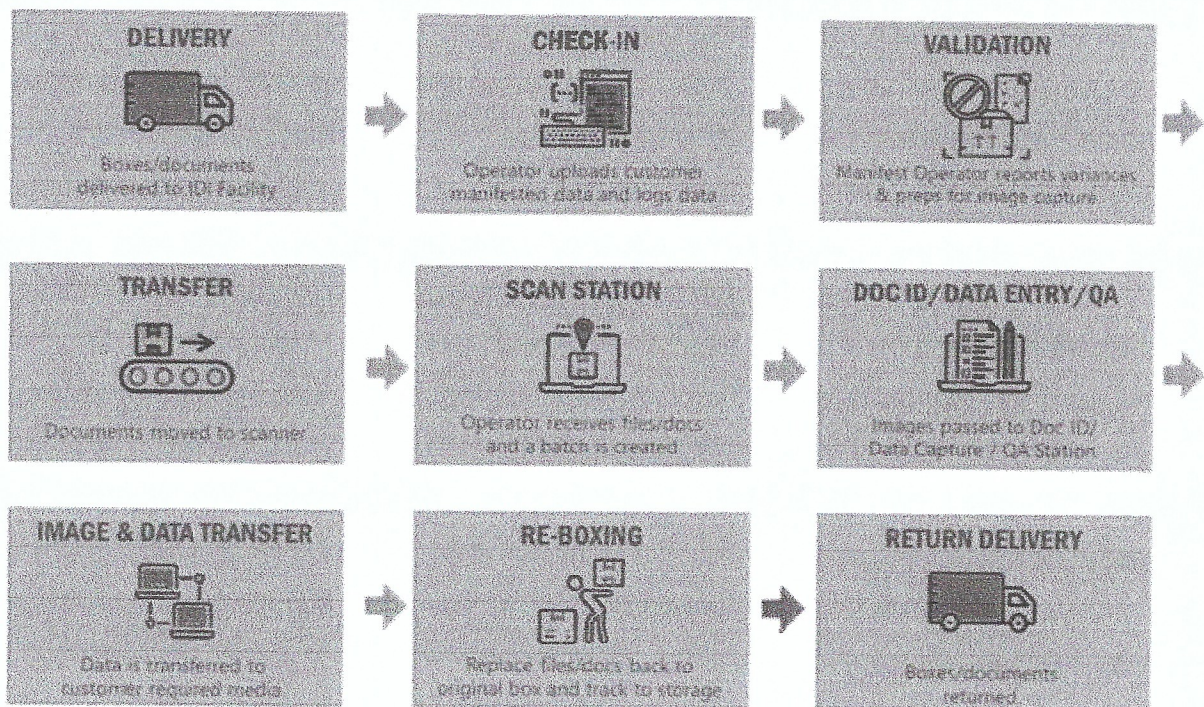
Sample Lean Cell Design



Production Planning and Process Control Activities

The Production phase commences with the transfer of project knowledge from Ramp up to production personnel through systematic training. A team of cross-functional personnel carries out the production activities. This team is dedicated to meet the customers' requirement in terms of quality, timeliness and other deliverables. The cross-functional team contains expertise for document preparation, conversion instruction, ramp up, software, and production planning activities.

The initial activity in the production phase is the creation of the project management/implementation plan that describes the quality objectives, the project deliverables, project schedules, resource requirements, training schedules, risk assessment, risk mitigation plans and individual responsibilities towards meeting the project targets and deliverables.



The following are examples of quality measures within the project:

Document Preparation - Paper Audit (If warranted)

- IDI will insert a "File Level" barcode sheet as well as "Document Type" barcode labels on the various document types within the file.
- Paper files will be audited to validate the document preparation process is complete and accurate prior to being sent to the scanning area.

Scanning – Attended Mode QC

- Scan in "Attended Mode" to assure that the best quality image is rendered
- Visually inspects each image as it is captured and interrupt scanning if any issues that comprise image quality are detected such as double feeds, folded corners, light images, dark images etc.
- While attended mode scanning is slower than unattended scanning, it provides the first line of image quality control and avoids re-scanning documents.
- IDI unitizes auto-blank page deletion when dropping the back side/page of a paper document with no content. This process is over 99% effective/accurate provided the backs are clean of smudges and darkened areas. With this process, backs with content will not be deleted but backs that have content, dark areas, or smudges will remain and be part of the image transfer stream.

Image Clean-up Processes

- Image processing includes de-skew, de-speckle, black border removal and crop.
- IDI utilizes state of the art production scanners and image processing technologies to render the best possible electronic document images comparable to the quality of the original documents.
- Set-up entails scanner adjustments to assure the accurate and complete capture of the documents.

Post Scan Automated QC

- QC steps are looking for a corrupt image, large image file size, etc.
- In addition other steps are typically introduced which may include:
- Manually review blank backs and delete.

Post Scan Visual QC

- After the automated QC has completed, a QC operator will perform visual QC of images and data prior to sending the batch to "Release". This is a random effort after all errors in the process have been corrected.

Workflow QC

- If discrepancies are found within a batch in any step of the conversion process, then the entire batch is directed to Quality Control Module and re-processed to correct identified issues.

Post Release QC

- An automated process is run against the batch to ensure all images and data have been written properly and none are corrupt.

TOWN OF NEEDHAM

Pricing Summary

Needham, MA Marriage Vitals-- Books		
Description	# Books/Units	Images
Marriage Records	93	16,275
One-time set-up		
Pick-up Return		

Note: Pricing is based on the document samples reviewed and outlined in this proposal. Other documents not described for these same and other departments may need review for valid pricing points.

IDI expects documents to be in orderly condition, not damaged by water or other contaminants, with easily identifiable index fields and light to medium prep of documents. If these conditions do not exist, boxes may be rejected, or price increase may apply.

Above is the complete list of services priced in this agreement. Other services required and not outlined in this enclosure should not be implied.

Pricing is based on the quantities listed in this proposal. If the images are more or less than 10% of the assumed quantities, the per-image price is subject to change based on the number of images actually submitted.

Authorization & Agreement

The Town of Needham hereby agrees to the procedures outlined above and authorizes Image Data to proceed with the project.

Note: pricing is based on the quantities listed in this proposal. If the images are more or less than 10% of the assumed quantities, the per-image price is subject to change based on the number of images actually submitted. Pricing is also based on site review and specifications included in this proposal.

In witness whereof, this agreement has been executed by a respective signatory of each party whose signature appears below and is on the date of this Agreement duly authorized by all necessary and required corporate action to execute this agreement.

Customer: Town of Needham
Address: 1471 Highland Ave.
Needham, MA 02492

Vendor: Image Data, Inc.
Address: 18 Petra Lane
Albany, New York 12205

Name: _____

Name: Laurie Green

Printed: _____

Printed: Laurie Green

Title: _____

Title: Senior Account Executive

Date: _____

Date: November 20, 2020



Pricing Proposal
Quotation #: 17707647
Created On: 9/10/2019
Valid Until: 12/17/2020

Town of Needham

Theodora Eaton

1471 Highland Ave.
Needham, MA 02492
United States
Phone: 781-455-7500
Fax:
Email: Teaton@needhamma.gov

Inside Account Manager

Josh Donnelly

290 Davidson Ave
Somerset, NJ 08873
Phone: 800-527-6389 EXT 555-xxxx
Fax:
Email: josh_donnelly@shi.com

All Prices are in US Dollar (USD)

Product	Qty	Your Price	Total
1 Marriage Records Image Data, Inc. - Part#: Contract Name: Software Reseller Contract #: ITS58 Note: 93 Books/Units	16275	\$0.61	\$9,927.75
2 One-time set-up Image Data, Inc. - Part#: Contract Name: Software Reseller Contract #: ITS58	1	\$239.36	\$239.36
3 Pick-up Image Data, Inc. - Part#: Contract Name: Software Reseller Contract #: ITS58	1	\$452.13	\$452.13
4 Return Image Data, Inc. - Part#: Contract Name: Software Reseller Contract #: ITS58	1	\$452.13	\$452.13
5 Project Management SHI CONFIG - Part#: Contract Name: IT Project Services Contract #: ITS74	1	\$500.00	\$500.00
Total			\$11,571.37

Additional Comments

Hardware items on this quote may be updated to reflect changes due to industry wide constraints and fluctuations.

Thank you for choosing SHI International Corp! The pricing offered on this quote proposal is valid through the expiration date listed above. To ensure the best level of service, please provide End User Name, Phone Number, Email Address and applicable Contract Number when submitting a Purchase Order. For any additional information including Hardware, Software and Services Contracts

please contact an SHI Inside Sales Representative at (888) 744-4084.

SHI International Corp. is 100% Minority Owned, Woman Owned Business.
TAX ID# 22-3009648; DUNS# 61-1429481; CCR# 61-243957G; CAGE 1HTF0

The products offered under this proposal are resold in accordance with the terms and conditions of the Contract referenced under that applicable line item.

CPC USE ONLY:
Application # FY22-03
Qualifies: _____
Does not qualify: _____

INITIAL ELIGIBILITY PROJECT APPLICATION FORM

DUE BY DECEMBER 4, 2020

**TOWN OF NEEDHAM
COMMUNITY PRESERVATION COMMITTEE**

www.needhamma.gov/CPC

Email Applications to:

Carys Lustig and Kristen Wright:

clustig@needhamma.gov & kwright@needhamma.gov

1. **Applicant:** Department of Public Works **Submission Date:** 12/01/2020
2. **Applicant's Address, Phone Number and Email:**
- Needham DPW
500 Dedham Ave.
Needham, MA 02492
Contact Name:
Cecilia Simchak
3. **Purpose:**
(Please select all that apply)
- ☐ Open Space
☐ Community Housing
☒ Historic Preservation
☐ Recreation
4. **Project Name:** Town Hall Clock Repairs
5. **Project Location/Address/Ownership (Control):**
Needham Downtown Town Common, Town of Needham
6. **Amount Requested:** \$ 83,000
7. **Estimated Total Project Cost (If Different):** \$
8. **Critical Dates: (If Applicable)**

- continued -

CPC USE ONLY:	
Application #	FY22-03
Qualifies:	_____
Does not qualify:	_____

Project Name: Town Hall Clock Repairs

9. Project Summary: In 100 words or less provide a brief summary of the project:

This request is for funding to remove the existing gold-leafed numerals and minute markers, reapply gold-leaf to all screws and other areas in need of touch up, scrape the clock faces to bare wood, apply two coats each of primer and top coats in black stain without smalted finish, power wash the entire cupola, scrape and spot prime any loose paint, apply a top coat to all currently painted surfaces, and reinstall gold-leafed numerals and minute markers. A lift or rope access will be required.

10. Community Need: In 100 words or less provide a brief statement of the need for and the benefits to the community.

The clock at Town Hall is a focal point in the area. Making these repairs would prevent from more costly repairs in the future. It would also maintain the aesthetic of the clock.

Note: *This application enables the Community Preservation Committee to review the request to assess eligibility. You shall be notified by January 1 of your eligibility. If eligible you will be requested to supply additional information by February 1.*

Capital Funding Request					
Title	Town Hall Clock Repairs			Submitted by	
Request Type	Standalone Funding Request	Capital Type	Building	PW Building Maintenance	
				Funding Request	Funding Year
Description					
					2022

The clock outside of Town Hall is in need of repairs. This request is for funding to remove the existing goldleafed numerals and minute markers, reapply goldleaf to all screws and other areas in need of touch up, scrape the clock faces to bare wood, apply two coats each of primer and top coats in black stain without smlated finish, power wash the entire cupola, scrape and spot prime any loose paint, apply a top coat to all currently painted surfaces, and reinstall goldleafed numerals and minute markers. This will help maintain the aesthetic of the clock and avoid more costly repairs in the future. A lift or rope access will be required for this work.

The cost of this project is \$83,000.

CPC USE ONLY:	
Application #	FY22-04
Qualifies:	_____
Does not qualify:	_____

INITIAL ELIGIBILITY PROJECT APPLICATION FORM

DUE BY DECEMBER 4, 2020

TOWN OF NEEDHAM COMMUNITY PRESERVATION COMMITTEE

www.needhamma.gov/CPC

Email Applications to:

Carys Lustig and Kristen Wright:

clustig@needhamma.gov & kwright@needhamma.gov

1. **Applicant:** Town Manager, DPW **Submission Date:** 12/01/2020

2. **Applicant's Address, Phone Number and Email:**

Needham DPW
500 Dedham Ave.
Needham, MA 02492

Contact Name:
Cecilia Simchak
3. **Purpose:**
(Please select all that apply)
 - ☒ Open Space
 - ☐ Community Housing
 - ☒ Historic Preservation
 - ☒ Recreation

4. **Project Name:** Town Common Historic Redesign and Beautification
5. **Project Location/Address/Ownership (Control):**
Needham Downtown Town Common, Town of Needham

6. **Amount Requested:** \$ 1,364,000

7. **Estimated Total Project Cost (If Different):** \$

8. **Critical Dates: (If Applicable)**

- continued -

CPC USE ONLY:	
Application #	<u>FY22-04</u>
Qualifies:	_____
Does not qualify:	_____

Project Name: Town Common Historic Redesign and Beautification

9. Project Summary: In 100 words or less provide a brief summary of the project:

The Town is seeking funding for construction services for the Town Common project. The area in this project includes the green space between the southern curb line of Garrity Way to the curb line of Great Plain Avenue to the south and from the curb lines of Chapel Street and Highland Avenue. Garrity Way and the parking area are not included in this project. The work here will integrate and connect to the recently constructed Phase 1 Needham Downtown Streetscape Project. The Town Common design project looked to design a Town Common space that maximizes the current usage of the space and integrates with the new downtown streetscape improvements. This design ensures historic preservation of the Town Common space, while providing for the functionality required in the 21st century including up-lighting, electrical capacity (outlets), sound, etc.

10. Community Need: In 100 words or less provide a brief statement of the need for and the benefits to the community.

The Town Common has long been used for a gathering spot for the community. Unfortunately, the space is showing signs of age. This has become more noticeable since the completion of the Downtown Streetscape Phase 1. This reconstruction will focus on making this space beautiful as well as functional.

Note: *This application enables the Community Preservation Committee to review the request to assess eligibility. You shall be notified by January 1 of your eligibility. If eligible you will be requested to supply additional information by February 1.*

Capital Funding Request					
Title	Town Common Historic Redesign and Beautification				
Request Type	Multiyear Funding Request	Capital Type	Infrastructure	Submitted by Funding Request	PW Parks and Forestry See Attached
			Description		
			2022		

The Town completed an internal design process for the Town Common and drafted a scope of service which includes improved hardscape, landscaping, amenities, tree plantings, and utility upgrades that are consistent with the historic nature of the Common and the new Downtown Streetscape Improvement Project.

Capital Request Detail			
Project Title	Town Common Historic Redesign and Beautification	Fiscal Year	2022
Project Phase	Construction	Request Status	Existing
Useful Life	More than 15 Years	FF&E	
Primary Function	Culture and Leisure	Technology	
Budget Impact	May increase annual operating expenses by less than \$5,000	Other Expenses	
	Project Cost Source	Project Cost	\$1,364,000
	Parameters		Response
1.	Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?		No
2.	Are there recommendations or costs identified by other departments which are NOT factored into the request?		No
3.	Does this project require any permitting by any Town or State agency?		Yes
4.	If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?		No
5.	Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?		No
6.	Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?		Yes
7.	Is this a request in response to a Court, Federal, or State order?		No
8.	Is this a request in response to a documented public health or safety condition?		No
9.	Is this a request to improve or make repairs to extend the useful life of a building?		No
10.	Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?		No
11.	Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?		No
12.	Will any other department be required to provide assistance in order to complete the project?		Yes
13.	If funded, will this project increase the operating expense for any other department?		No
14.	If funded, will additional permanent staff be required, and if so what is the total number of FTE's?	Total New FTE's	0
Project Description and Considerations			

This project will install new sod, trees, plantings, low maintenance hardscape materials, and increase handicap accessibility. The pathways and landscaping will be adjusted to become more aesthetically pleasing and functionally enhanced. There will be increased electrical and sound capacity to accommodate Town-wide events. This request is for the funding for the construction phase of this project. The design phase was funded in FY2020.

Changes from Prior Year Submission

The increase in cost is due to an updated quote from the current design, now that the Town is further along in the design process.

Clarification of Questions

- This project may be subject to Planning Board review.
- This project is being evaluated for eligibility of Community Preservation Funds under the category of Historic Preservation.
- The Town Manager's Office will be involved.

CPC USE ONLY:	
Application #	<u>FY22-05</u>
Qualifies:	_____
Does not qualify:	_____

INITIAL ELIGIBILITY PROJECT APPLICATION FORM

DUE BY DECEMBER 4, 2020

TOWN OF NEEDHAM COMMUNITY PRESERVATION COMMITTEE

www.needhamma.gov/CPC

Email Applications to:

Carys Lustig and Kristen Wright:

clustig@needhamma.gov & kwright@needhamma.gov

1. **Applicant:** Town Manager & Bay Colony Rail Trail Association (BCRTA) **Submission Date:** December 4, 2020
2. **Applicant's Address, Phone Number and Email:**

1471 Highland Ave., Needham, MA 02492

BCRTA, PO Box 920560, Needham, MA 02492

Contact Name:
Kate Fitzpatrick-Town Manager; J Golstein-BCRTA
3. **Purpose:**
(Please select all that apply)
 - ☐ Open Space
 - ☐ Community Housing
 - ☐ Historic Preservation
 - ☒ Recreation
4. **Project Name:** Fisher St. Trailhead, Needham Rail Trail
5. **Project Location/Address/Ownership (Control):**
Fisher Street at Rail Trail, across from MA DCR's Red Wing Bay
MBTA ownership; Town holds 99 year lease for use of rail right-of-way for rail trail
6. **Amount Requested:** \$ 15,000
7. **Estimated Total Project Cost (If Different):** \$ 15,000
8. **Critical Dates: (If Applicable)**

- continued -

CPC USE ONLY:	
Application #	<u>FY22-05</u>
Qualifies:	_____
Does not qualify:	_____

Project Name: Fisher St. Trailhead, Needham Rail Trail

9. Project Summary: In 100 words or less provide a brief summary of the project:

Completed in 2016 through a joint effort of the BCRTA and the Town, the Needham Rail Trail is a recreational path from the Charles River near the Dover line to the Town Forest near High Rock St.

From trail conception, a trailhead at Fisher Street was envisioned comprising a stone driveway and parking area, a wooden guardrail, and landscaping. Due to budget constraints the trailhead was never constructed.

In 2019 the CPC provided a \$15,000 grant for design of the trailhead. Over the past year the project has evolved. With input from BCRTA and others, the Town Engineer produced the trailhead design internally. Thus, the design funds are being returned to the Town.

The Town now plans to construct the trailhead using DPW staff. The current \$15,000 request is for materials: (wood guardrail, asphalt for handicap parking, etc.) and would allow the Town to complete construction.

10. Community Need: In 100 words or less provide a brief statement of the need for and the benefits to the community.

The Needham Rail Trail addresses the expressed interest among Needham residents for having a variety of natural trails throughout the community. The Rail Trail's flat terrain makes it ideal for people of all ages and abilities. The proposed trailhead at Fisher Street will not only improve the accessibility of the Rail Trail, its proximity to Red Wing Bay and the Charles River Peninsula will make the area more of a destination for passive recreation. The Town and the Bay Colony Rail Trail Association will collaborate in finalizing trailhead signage and interpretive elements, making the trailhead a hub of recreational activities in the area.

In the future additional amenities may be added, such as a play area for young children and a storybook walk, modeled after the one on the Upper Charles Trail in Holliston.

Note: *This application enables the Community Preservation Committee to review the request to assess eligibility. You shall be notified by January 1 of your eligibility. If eligible you will be requested to supply additional information by February 1.*

CPC USE ONLY:
Application # **FY22-06**

Qualifies: _____

Does not qualify: _____

INITIAL ELIGIBILITY PROJECT APPLICATION FORM

DUE BY DECEMBER 4, 2020

**TOWN OF NEEDHAM
COMMUNITY PRESERVATION COMMITTEE**

www.needhamma.gov/CPC

Email Applications to:

Carys Lustig and Kristen Wright:

clustig@needhamma.gov & kwright@needhamma.gov

1. **Applicant:** Town of Needham Public Works & Park and Recreation **Submission Date:** 12/01/2020
2. **Applicant's Address, Phone Number and Email:**

Needham DPW
500 Dedham Ave.
Needham, MA 02492
Contact Name:
Ed Olsen, Superintendent of Parks & Forestry
3. **Purpose:**
(Please select all that apply)

☐ Open Space
☐ Community Housing
☐ Historic Preservation
☒ Recreation
4. **Project Name:** Resurface Synthetic Track at DeFazio
5. **Project Location/Address/Ownership (Control):**

380 Dedham Ave.
Needham, MA 02492
6. **Amount Requested:** \$ 166,000
7. **Estimated Total Project Cost (If Different):** \$
8. **Critical Dates: (If Applicable)**

- continued -

CPC USE ONLY:	
Application #	<u>FY22-06</u>
Qualifies:	_____
Does not qualify:	_____

Project Name: Resurface Synthetic Track at DeFazio

9. Project Summary: In 100 words or less provide a brief summary of the project:

The Parks and Forestry Superintendent and a consultant evaluated the synthetic track at DeFazio and determined there was delamination. The track had a five year warranty. Track surfaces typically require a resurfacing after eight to ten years. The track is currently twelve years old and is showing signs of wear and tear typically associated with that age. Our installed present track system can extend its useful life to approximately 20 to 25 years if it is resurfaced mid life span. A surface, structural spray treatment or resurfacing, as is requested in this project, will negate the need for a premature and costly total replacement.

10. Community Need: In 100 words or less provide a brief statement of the need for and the benefits to the community.

This is the only track used by High School sports, community sports, and the general public. It is also lit for evening use by the community. Providing this proactive repair will extend the life of the track and reduce the need for a total replacement in the near future. The track is showing signs of wear and tear. If this continues much longer, the track will need to be replaced and not resurfaced.

Note: *This application enables the Community Preservation Committee to review the request to assess eligibility. You shall be notified by January 1 of your eligibility. If eligible you will be requested to supply additional information by February 1.*

Capital Request Detail						
Project Title	Athletic Facility Improvements		Fiscal Year		2022	Request Status
Project Phase	Design/Engineering	More than 15 Years	Planning/Design	Construction	\$166,000	FF&E
Useful Life	Culture and Leisure	May increase annual operating expenses by less than \$5,000	Land	Equipment		Technology
Primary Function			Site Preparation			Other Expenses
Budget Impact				Project Cost Source	Hired Consultant	Project Cost
						\$211,000
Parameters						
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						
3. Does this project require any permitting by any Town or State agency?						
4. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?						
5. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						
6. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						
7. Is this a request in response to a Court, Federal, or State order?						
8. Is this a request in response to a documented public health or safety condition?						
9. Is this a request to improve or make repairs to extend the useful life of a building?						
10. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						
11. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						
12. Will any other department be required to provide assistance in order to complete the project?						
13. If funded, will this project increase the operating expense for any other department?						
14. If funded, will additional permanent staff be required, and if so what is the total number of FTE's?						
					Total New FTE's	0
Project Description and Considerations						

McCloud Field Renovation: Design (\$45,000)

Since the field was renovated in 2009, there has been several drainage issues related to the 4' drain pipe that runs through the field. This has caused sink holes that require emergency repair for the field to be safely used. These sink holes appear after large rain events that wash out the materials from underneath the field.

Currently there are several methodologies that vary in terms of invasiveness and cost to address this issue that will be vetted out in the design. This will address both the 4' drain and the subsurface of the field that has been eroded by storm water events. The budget proposed is for one of the more invasive approaches to ensure there is sufficient funding to return the field to operation. This funding is for the design component of this project. The construction funding will be requested in FY2023.

Synthetic Track at Defazio (\$166,000)

The Parks and Forestry Superintendent and a consultant evaluated the synthetic track at Defazio and determined there was delamination. Basic maintenance, including this work, will be required to ensure that a total replacement isn't necessary. This request is to resurface the synthetic track.

Changes from Prior Year Submission:

The Athletic Facility Improvements Article was not funded at the Town Meeting in May 2020 but was approved at the Special Town Meeting in October 2020. Therefore, any construction projects originally scheduled for funding in FY2022 are pushed back to FY2023 to give the Department time to work on the design. The Synthetic Track at Defazio project was not funded in FY2021 and is resubmitted here.

Project Title	Athletic Facility Improvements	Capital Request Detail	Fiscal Year	2022	Request Status	Resubmitted
		Additional Description and Considerations				

Clarifications of Questions:

- 3. Conservation Commission permitting and Planning Board filing may be required.
- 6. All items except for Turf Fields are eligible for Community Preservation Funds.
- 12. The Department of Public Works will be partnering with Park and Recreation.

CPC USE ONLY:	
Application #	FY22-07
Qualifies:	_____
Does not qualify:	_____

INITIAL ELIGIBILITY PROJECT APPLICATION FORM

DUE BY DECEMBER 4, 2020

TOWN OF NEEDHAM COMMUNITY PRESERVATION COMMITTEE

www.needhamma.gov/CPC

Email Applications to:

Carys Lustig and Kristen Wright:

clustig@needhamma.gov & kwright@needhamma.gov

- Applicant:** Town of Needham Public Works and Park and Recreation **Submission Date:** 12/01/2020
- Applicant's Address, Phone Number and Email:**

Needham DPW
500 Dedham Ave.
Needham, MA 02492

Contact Name:
Ed Olsen, Superintendent of Parks & Forestry
- Purpose:**
(Please select all that apply)

☒	Open Space
☐	Community Housing
☐	Historic Preservation
☒	Recreation
- Project Name:** McLeod Field Renovation
- Project Location/Address/Ownership (Control):**
McLeod Field, Town of Needham
- Amount Requested:** \$ 45,000
- Estimated Total Project Cost (If Different):** \$
- Critical Dates: (If Applicable)**

- continued -

CPC USE ONLY:	
Application #	FY22-07
Qualifies:	_____
Does not qualify:	_____

Project Name: McLeod Field Renovation

9. Project Summary: In 100 words or less provide a brief summary of the project:

The outfield section of the baseball diamond has been plagued with sinkholes due to the 4' drain pipe that runs through the field. Following heavy rains, large holes appear throughout the outfield that require emergency repairs. These holes have varied in size. This funding is for the design work to look at the most appropriate method to address the 4' drain and the subsurface that has been eroded.

10. Community Need: In 100 words or less provide a brief statement of the need for and the benefits to the community.

McLeod Field is one of four 90' baseball fields in Town. This field is used to support the High School Athletics program in the Spring for Varsity, JV, and Freshman baseball games. Additionally, the field is used by Needham Little League in the evenings during the Spring and throughout the days in the Summer and Fall. Needham Soccer Club has also used this field to help support their annual Memorial Day soccer games. The sink holes make the upkeep of the field and consistent, safe use of the field difficult. Due to the sinkholes, many games have had to be canceled. By addressing these issues, the field will be in better shape for the community.

Note: *This application enables the Community Preservation Committee to review the request to assess eligibility. You shall be notified by January 1 of your eligibility. If eligible you will be requested to supply additional information by February 1.*

Capital Funding Request							
Title		Athletic Facility Improvements		Submitted by		PW Parks and Forestry	
Request Type	Annual Funding Request	Capital Type	Infrastructure	Funding Request	See Attached	Funding Year	See Attached
Description							

The Department of Public Works and Park and Recreation have developed a maintenance plan for all fields, which includes new construction, total reconstruction, partial renovation, irrigation, drainage improvements, and equipment replacement or repair (bleachers, fences/backstops, player benches, and miscellaneous equipment) for multi-use fields and ball diamonds.

Capital Request Detail						
Project Title	Athletic Facility Improvements		Fiscal Year	2022	Request Status	Resubmitted
Project Phase	Design/Engineering	Useful Life	Planning/Design	\$45,000	FF&E	
Primary Function	Culture and Leisure	More than 15 Years	Land	Construction Management	Technology	
Budget Impact	May increase annual operating expenses by less than \$5,000	Site Preparation	Equipment	Hired Consultant	Other Expenses	
Parameters						Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No
3. Does this project require any permitting by any Town or State agency?						Yes
4. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?						No
5. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No
6. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						Yes
7. Is this a request in response to a Court, Federal, or State order?						No
8. Is this a request in response to a documented public health or safety condition?						No
9. Is this a request to improve or make repairs to extend the useful life of a building?						No
10. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No
11. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No
12. Will any other department be required to provide assistance in order to complete the project?						Yes
13. If funded, will this project increase the operating expense for any other department?						No
14. If funded, will additional permanent staff be required, and if so what is the total number of FTE's?						No
Total New FTE's						0
Project Description and Considerations						

McCloud Field Renovation: Design (\$45,000)

Since the field was renovated in 2009, there has been several drainage issues related to the 4' drain pipe that runs through the field. This has caused sink holes that require emergency repair for the field to be safely used. These sink holes appear after large rain events that wash out the materials from underneath the field.

Currently there are several methodologies that vary in terms of invasiveness and cost to address this issue that will be vetted out in the design. This will address both the 4' drain and the subsurface of the field that has been eroded by storm water events. The budget proposed is for one of the more invasive approaches to ensure there is sufficient funding to return the field to operation. This funding is for the design component of this project. The construction funding will be requested in FY2023.

Synthetic Track at Defazio (\$166,000)

The Parks and Forestry Superintendent and a consultant evaluated the synthetic track at Defazio and determined there was delamination. Basic maintenance, including this work, will be required to ensure that a total replacement isn't necessary. This request is to resurface the synthetic track.

Changes from Prior Year Submission:

The Athletic Facility Improvements Article was not funded at the Town Meeting in May 2020 but was approved at the Special Town Meeting in October 2020. Therefore, any construction projects originally scheduled for funding in FY2022 are pushed back to FY2023 to give the Department time to work on the design. The Synthetic Track at Defazio project was not funded in FY2021 and is resubmitted here.

Capital Request Detail		Fiscal Year	Request Status	Resubmitted
Project Title	Athletic Facility Improvements			

Additional Description and Considerations

Clarifications of Questions:

3. Conservation Commission permitting and Planning Board filing may be required.
6. All items except for Turf Fields are eligible for Community Preservation Funds.
12. The Department of Public Works will be partnering with Park and Recreation.

CPC USE ONLY:	
Application #	<u>FY22-08</u>
Qualifies:	_____
Does not qualify:	_____

INITIAL ELIGIBILITY PROJECT APPLICATION FORM

DUE BY DECEMBER 4, 2020

TOWN OF NEEDHAM COMMUNITY PRESERVATION COMMITTEE

www.needhamma.gov/CPC

Email Applications to:

Carys Lustig and Kristen Wright:

clustig@needhamma.gov & kwright@needhamma.gov

- Applicant:** Town of Needham Conservation Commission
Submission Date: 12/4/2020
- Applicant's Address, Phone Number and Email:**
500 Dedham Avenue, Needham, MA 02492
781-455-7550 x 248
Anderson@Needhamma.gov
Contact Name:
Debbie Anderson, Director of Conservation
- Purpose:**
(Please select all that apply)
☒ Open Space
☐ Community Housing
☐ Historic Preservation
☒ Recreation
- Project Name:** Professional Design Services - Trail Identification
- Project Location/Address/Ownership (Control):**
Various trail locations throughout the Town under jurisdiction of the Conservation Commission, Park and Recreation Commission, School Committee and Select Board.
- Amount Requested:** \$ 6,000
- Estimated Total Project Cost (If Different):** \$ 6,000
- Critical Dates: (If Applicable)**

- continued -

CPC USE ONLY:	
Application #	FY22-08
Qualifies:	_____
Does not qualify:	_____

Project Name: Professional Design Services - Trail Identification

9. Project Summary: In 100 words or less provide a brief summary of the project:

This request looks to address a long-standing goal of the Conservation Commission and is identified as a priority in the Town of Needham - Trails Master Plan. If this request is funded, the Town of Needham would look to hire a pre-approved Design and Engineering Firm to help the Commission with the following goals:

1. Options for graphic presentation of standardized trail mapping.
2. Developing a system of identification signage for the trail heads and options for trail head information kiosks and directional signs including trail markers.

*Please see attached proposal from Tighe & Bond.

The proposal is for the design of a system of identification signage for the trail heads, information kiosks and directional signage including trail markers for these properties. We anticipate that we will come back before the CPC with a request for funds to implement these improvements later.

10. Community Need: In 100 words or less provide a brief statement of the need for and the benefits to the community.

The Conservation Commission, Park and Recreation Commission, School Committee, and Select Board, manage the Town's Open Space resources. There is an extensive trail network, established with guidance from the Needham Trails Master Plan, adopted in 2008. There are also a number of trail maps published for resident and visitor use. At the present time, each parcel with trails may have a separate, independently designed site indicating its name. Signs and trail markers are different at each location, if present at all.

The Town wishes to create a standardized "look and feel" of signage located at the various parcels including trail heads, trail markers and kiosks. Having cohesive, easy to follow, signage and markers, as well as, additional kiosks will encourage the public and visitors to enjoy our trails and all the properties have to offer.

Note: *This application enables the Community Preservation Committee to review the request to assess eligibility. You shall be notified by January 1 of your eligibility. If eligible you will be requested to supply additional information by February 1.*

N-5001
October 23, 2019

Edward Olsen, Superintendent
Parks & Forestry Division
470 Dedham Avenue
Needham, MA 02492

**RE: Professional Design Services
Trail Mapping and Identification**

Dear Mr. Olsen,

In response to the Town's request, Tighe & Bond is pleased to submit this proposal to work with you and your staff to develop designs for standardized trail entrance signage, trail markers, and trailhead information kiosks.

Background

The Conservation Commission, along with the Division of Parks and Forestry, manage the Town's open space resources. There is an extensive trail network, established through the guidance of the Needham Trails Master Plan, adopted in 2008. There are also a number of trail maps published for resident and visitor use. The Town wishes to create a standardized "look and feel" for the maps and create a trail kiosk and trailhead theme to implement throughout the Town's properties.

Scope of Services

We have developed the following proposed Scope of Services based on our understanding of the project:

Task 1 – Trail System Branding

- 1.1 Tighe & Bond will attend a meeting of the Conservation Commission to discuss our approach to development of the vision for trail mapping and trailhead features. Prior to this meeting, we will visit the various sites to review existing conditions.
- 1.2 Using the trail maps already developed by the Town as a starting point, Tighe & Bond will develop up to three (3) options for graphic presentation of standardized trail mapping. These maps will be suitable for posting online and in paper format for brochures/trail guides and for posting at trail heads.
- 1.3 We will develop a system of identification signage for the trailheads and options for trailhead information kiosks and directional signage including trail markers.
- 1.4 Tighe & Bond will attend a second meeting of the Conservation Commission to review the options for trail graphics, kiosks, and trail markers, and select a preferred option for each.
- 1.5 Following selection of a preferred option, Tighe & Bond will create design standards for each element for the Town's use in implementation of the vision and replacement and renovation of facilities.

Assumptions

Detailed design and construction of trail markings and kiosks is not included in this proposal. Meetings and coordination will be as noted, and additional meetings may require an amendment to this agreement.

Schedule

We look forward to continuing our relationship with the Town by providing these services. We propose the following project schedule:

Preliminary meeting & site visit:	November 14, 2019
Presentation of alternatives:	December 12, 2019
Completion of design standard documents:	January 15, 2020

Budget

Tighe & Bond will perform these services for a lump sum fee of \$5,700, invoiced monthly based on percentage complete plus reimbursable expenses as incurred. In the event that the scope of work is increased for any reason, the lump sum fee to complete the work shall be mutually revised by written amendment.

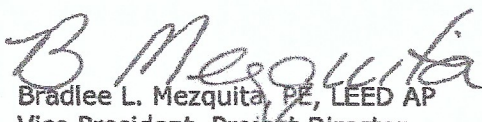
Please forward a project agreement based on this proposal and our current Master Agreement for our review and signature.

Tighe & Bond will undertake the project upon receipt of an executed contract.

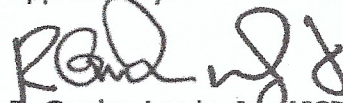
If you have any questions or require additional information, please contact Bradlee Mezquita at 603-433-8818, or Gordon Leedy at 603-294-9234. We look forward to assisting you with this project.

Very truly yours,

TIGHE & BOND, INC.


Bradlee L. Mezquita, PE, LEED AP
Vice President, Project Director

Approved by:


R. Gordon Leedy, Jr., AICP, RLA
Principal Landscape Architect

Acceptance:

On behalf of the Town of Needham, MA the scope, fee, and terms of this proposal are hereby accepted.

Authorized Representative

Date

CPC USE ONLY:
Application # FY22-09
Qualifies: _____
Does not qualify: _____

INITIAL ELIGIBILITY PROJECT APPLICATION FORM

DUE BY DECEMBER 4, 2020

**TOWN OF NEEDHAM
COMMUNITY PRESERVATION COMMITTEE**

www.needhamma.gov/CPC

Email Applications to:

Carys Lustig and Kristen Wright:

clustig@needhamma.gov & kwright@needhamma.gov

1. **Applicant:** Town of Needham Public Works, Park and Recreation, and Walker Pond Watershed Association

Submission Date: 12/01/2020

2. **Applicant's Address, Phone Number and Email:**

3.

Purpose:

(Please select all that apply)

Needham DPW

500 Dedham Ave.

Needham, MA 02492

Contact Name:

Anthony DelGaizo, Town Engineer



Open Space



Community Housing



Historic Preservation



Recreation

4. **Project Name:** Walker Pond Improvement

5. **Project Location/Address/Ownership (Control):**

Walker Lane/CentralAve; Owned by the Town and the Walker Pond Watershed Association

6. **Amount Requested:**

\$ 125,000

7. **Estimated Total Project Cost (If Different):**

\$ \$481,000 (additional costs next y.

8. **Critical Dates: (If Applicable)**

- continued -

CPC USE ONLY:	
Application #	FY22-09
Qualifies:	_____
Does not qualify:	_____

Project Name: Walker Pond Improvement

9. Project Summary: In 100 words or less provide a brief summary of the project:

This funding is for Category 1 of the Walker Pond Improvements, which includes the installation of three 6 foot diameter drainage manholes, the installation of wildflowers, tall grass, and tree mixtures, the installation of a tree infiltration system designed by the Conservation Commission, and educational information, including pamphlets and signage. This work aims to improve the health of the pond, removing excessive aquatic vegetation. A study by ESS Group, Inc. found that "Walker Pond is covered with nuisance levels of native watermeal and duckweed" that needs to be removed.

10. Community Need: In 100 words or less provide a brief statement of the need for and the benefits to the community.

Walker Pond is an area of open space and recreation that Needham residents enjoy. The pond houses a variety of species of wildlife, including songbirds, nesting swans and ducks, herons, owls, turtles, and fish. The pond is a valuable resource for the community, allowing for fishing, birding, canoeing, and observing nature. Without remediation, the pond will not offer this resource to the community.

Note: *This application enables the Community Preservation Committee to review the request to assess eligibility. You shall be notified by January 1 of your eligibility. If eligible you will be requested to supply additional information by February 1.*

Capital Funding Request

Walker Pond Improvement		Submitted by		PW Engineering	
Request Type	Multyear Funding Request	Capital Type	Land	Funding Request	See Attached
				Funding Year	See Attached
Description					

Walker Pond is choked with excessive aquatic vegetation that needs to be removed for the health of the pond.

Capital Request Detail						
Project Title	Walker Pond Improvement		Fiscal Year	2022	Request Status	New
Project Phase	Construction			\$125,000	FF&E	
Useful Life	More than 9 Years				Technology	
Primary Function	Public Works				Other Expenses	
Budget Impact	May increase annual operating expenses by less than \$5,000				Project Cost	\$125,000
Parameters						
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						
3. Does this project require any permitting by any Town or State agency?						
4. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?						
5. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						
6. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						
7. Is this a request in response to a Court, Federal, or State order?						
8. Is this a request in response to a documented public health or safety condition?						
9. Is this a request to improve or make repairs to extend the useful life of a building?						
10. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						
11. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						
12. Will any other department be required to provide assistance in order to complete the project?						
13. If funded, will this project increase the operating expense for any other department?						
14. If funded, will additional permanent staff be required, and if so what is the total number of FTE's?						
					Total New FTE's	0

Project Description and Considerations

In FY22, DPW will start category 1 of the Walker Pond Improvement Project, which involves an analysis of the contributory area providing runoff to the pond. This work will be designed in-house. Interruptions in the stormwater flow are being proposed through the introduction of 8 foot wide bands or strips of wildflowers and tall grasses, including certain tree types to encourage infiltration and stormwater quality improvements through nutrient uptake and soil activity. Work will include the installation of three 6 foot diameter drainage manholes and sumps in order to address sediment and litter removal. The tree infiltration system was designed by the Conservation Commission. Category 1 also includes educational information and pamphlets in the watershed area, catch basin disks, newspaper ads, and educational signage.

Item	Cost
Category 1 - Pilot Project	
Installation of 3 - 6ft Diameter Drainage Manholes	\$43,000
Installation of Wildflower/Tall Grass & Tree Mixtures on Town Property	\$36,000
Installation of Tree Infiltration System Designed by Conservation Commission	\$28,750
Educational Information/Pamphlets in Watershed Area, Catch Basin Disks, Newspaper Ads, & Educational Signage	\$17,250
Total	\$125,000

Project Title		Walker Pond Improvements				Capital Request Detail		Fiscal Year		2023		Request Status		New	
Project Phase	Useful Life	Construction	More than 9 Years	Public Works	Planning/Design	Land	Site Preparation	Construction	Construction Management	Equipment	Project Cost	FF&E	Technology	Other Expenses	Project Cost
Budget Impact	May increase annual operating expenses by less than \$5,000														
Parameters															
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?															
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?															
3. Does this project require any permitting by any Town or State agency?															
4. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?															
5. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?															
6. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?															
7. Is this a request in response to a Court, Federal, or State order?															
8. Is this a request in response to a documented public health or safety condition?															
9. Is this a request to improve or make repairs to extend the useful life of a building?															
10. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?															
11. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?															
12. Will any other department be required to provide assistance in order to complete the project?															
13. If funded, will this project increase the operating expense for any other department?															
14. If funded, will additional permanent staff be required, and if so what is the total number of FTE's?															
Total New FTE's 0															
Project Description and Considerations															

In FY23, DPW will start category 2, which involves the improvements to the Walker Pond waterbody. The Conservation Commission requested a report, which was conducted by ESS, that included recommendations to improve the health of the pond. The Conservation Commission recommended the hydro raking. Hydro raking is the mechanical removal of vegetative overgrowth. They tentatively recommended the application of chemicals, herbicides, and algicides to the pond, so the funding is included in this request, pending a Notice of Intent. Also needed are improvements to the outlet structure, including the overflow grate and wooden stop-log replacements.

Category 2 - Improvements to Walker Pond Waterbody	
Addition of Chemicals	\$150,000
Hydro Raking & Removal of Excessive Vegetation	\$125,500
Replacement of Overflow Grate and Wooden Stop Logs	\$51,500
Permitting and Meetings	\$29,000
Total	\$356,000

Clarification of Questions

- Permits will be required from Conservation.

We, the undersigned owners and neighbors of Walker Pond, and as members of the Walker Pond Watershed Association, request the Town of Needham to clean up and preserve Walker Pond. In connection with that goal, we support the application of the Town of Needham to the Community Preservation Committee for funding.

Name	Street Address	Phone	Email	Owner?
Mark Etinger	19 WALKER LN, NEEDHAM	617 839 8033	NETTING@E6MALL.COM	
Elise Park	19 WALKER LN, NEEDHAM	617-678-5615	elisepark@yahoo.com	
ROY A CROMER	1796 Central Ave, Needham MA	617-974-3570	roycromer@rcn.com	
LOIS C. CAMBERG	1796 Central Ave, Needham, MA	781 864-5221	loisc@rcn.com	
John F. Dunning	1819 CENTRAL AVE, NEEDHAM	781-888-4603	JEDUNNING@GMAIL.COM	
Michael Leshchinskiy	31 Walker Ln, Needham	781 444 0461	mlshchinskiy@gmail.com	
Michael Leshchinskiy	31 Walker Ln, Needham, MA	781 444 0461	mlshchinskiy@gmail.com	
John F. Kelly	43 Walker Ln	781 444 1860		
John F. Kelly	43 Walker Ln	781 444 1860		

We, the undersigned owners and neighbors of Walker Pond, and as members of the Walker Pond Watershed Association, request the Town of Needham to clean up and preserve Walker Pond. In connection with that goal, we support the application of the Town of Needham to the Community Preservation Committee for funding.

Name

Street Address

Phone

Email

Owner?

DAVID NEUMAN DONOHUE 34 Russell Rd. 415-637-9989 ~~donohue~~ dneuman10
Lisa Murphy 1831 Center Ave 781-983-4924 ltm1965@yahoo.com YES
FRANCO CORNINO 67 WALKER POND, NEEDHAM MA 01992 francocornino@gmail.com
10/1

We, the undersigned owners and neighbors of Walker Pond, and as members of the Walker Pond Watershed Association, request the Town of Needham to clean up and preserve Walker Pond. In connection with that goal, we support the application of the Town of Needham to the Community Preservation Committee for funding.

Name	Street Address	Phone	Email	Owner?
Philip Rice	12 Russell Rd	917-602-8083	PRICET@CUMC.COM	Y
Megan Gilman	111 Walker Lane Needham	339-225-5819	mgilma@yahoo.com	Y
Daniel Gilman	111 Walker Lane	703-930-4897	dgilman@aol.com	Y
Genie Voloshin	92 Charles River	617-953-8777	gvoloshin@hotmail.com	Y
Lena Voloshin	92 Charles River	617-905-8555	lena.voloshin@gmail.com	Y
Dasha/Leo Solis	82 Charles River St.	617-399-3000	Dashisolis@gmail.com	
Greg/Rene Register	89 Charles River St.	203-960-0000	gregoryregister@icloud.com	Y
Andrew Krzens	121 Charles River St.	214-716-7331	krzensm@gmail.com	
Angie Gillis	"	781-552-6622	"	
Christopher Wood	35 Russell Rd	781-444-9314	-	
Robert Wood	35 Russell Rd	781-306-1193	brckwd68@aol.com	
Barbara Hauschka	105 Walker Ln.	781-254-2048	barbhaus@comcast.net	alittle
Don Hauschka	105 Walker Ln.	781-254-5049	"	"

We, the undersigned owners and neighbors of Walker Pond, and as members of the Walker Pond Watershed Association, request the Town of Needham to clean up and preserve Walker Pond. In connection with that goal, we support the application of the Town of Needham to the Community Preservation Committee for funding.

[illegible]

We, the undersigned owners and neighbors of Walker Pond, and as members of the Walker Pond Watershed Association, request the Town of Needham to clean up and preserve Walker Pond. In connection with that goal, we support the application of the Town of Needham to the Community Preservation Committee for funding.

Name	Street Address	Phone	Email	Comment
Eddie Michli	62 Charles Street	248 778-9045	emichli@yahoo.com	YS

We, the undersigned owners and neighbors of Walker Pond, and as members of the Walker Pond Watershed Association, request the Town of Needham to clean up and preserve Walker Pond. In connection with that goal, we support the application of the Town of Needham to the Community Preservation Committee for funding.

Name	Street Address	Phone	Email	Owner?
F. R. Heinzmann Jr.	1810 Central Ave Needham, MA 02492	(781) 455-8032	Bbobby1@AOL.com	Yes

J. R. Heinzmann Jr.

Penny Rubinfeld Heinzmann	1810 Central Ave Needham, MA 02492	(781) 455-8032	penrubund@aol.com	Yes
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Penny Rubinfeld Heinzmann

Wade Davis	1820 Central Ave Needham, MA 02492	(781) 455-5062		
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We, the undersigned owners and neighbors of Walker Pond, and as members of the Walker Pond Watershed Association, request the Town of Needham to clean up and preserve Walker Pond. In connection with that goal, we support the application of the Town of Needham to the Community Preservation Committee for funding.

[illegible]

CPC USE ONLY:	
Application #	<u>FY22-10</u>
Qualifies:	_____
Does not qualify:	_____

INITIAL ELIGIBILITY PROJECT APPLICATION FORM

DUE BY DECEMBER 4, 2020

TOWN OF NEEDHAM COMMUNITY PRESERVATION COMMITTEE

www.needhamma.gov/CPC

Email Applications to:

Carys Lustig and Kristen Wright:

clustig@needhamma.gov & kwright@needhamma.gov

1. **Applicant:** Town of Needham Public Works **Submission Date:** 12/01/2020
2. **Applicant's Address, Phone Number and Email:**

Needham DPW
500 Dedham Ave.
Needham, MA 02492

Contact Name:
Anthony DelGaizo, Town Engineer
3. **Purpose:**
(Please select all that apply)
 - ☒ Open Space
 - ☐ Community Housing
 - ☐ Historic Preservation
 - ☐ Recreation
4. **Project Name:** Town Reservoir Sediment Removal
5. **Project Location/Address/Ownership (Control):**
Town Reservoir, 500 Dedham Avenue, Town
6. **Amount Requested:** \$ 262,000
7. **Estimated Total Project Cost (If Different):** \$
8. **Critical Dates: (If Applicable)**

- continued -

CPC USE ONLY:	
Application #	<u>FY22-10</u>
Qualifies:	_____
Does not qualify:	_____

Project Name: Town Reservoir Sediment Removal

9. Project Summary: In 100 words or less provide a brief summary of the project:

The sediment at the bottom of the reservoir is impaired and must be addressed. This funding request is for the design to determine the best way to address the sediment.

10. Community Need: In 100 words or less provide a brief statement of the need for and the benefits to the community.

The reservoir discharges to Alder Brook, which is listed as a category 5 impaired water body, according to the National Pollutant Discharge Elimination System (NPDES), and is the worst rating. This project will improve the health of the reservoir and the brook.

Note: *This application enables the Community Preservation Committee to review the request to assess eligibility. You shall be notified by January 1 of your eligibility. If eligible you will be requested to supply additional information by February 1.*

Capital Funding Request						
Title	Drain System Improvement		Submitted by		Sewer Enterprise	
Request Type	Multiyear Funding Request	Capital Type	Infrastructure	Funding Request	See Attached	Funding Year
	Description					

The Town entered into a Memorandum of Understanding (MOU) with the Environmental Protection Agency (EPA) to commence a Town-wide investigation of stormwater discharge to address the pollutants through stormwater into the Charles River Basin and other water bodies. Incorporated into this plan are improvements to the Stormwater Drainage System to upgrade the quality of the water discharged into the Charles River in Town. This request is to support action items identified in the MOU. In 2003, the EPA National Pollutant Discharge Elimination System (NPDES) Stormwater Drainage Permit took effect. It incorporated several requirements identified in the existing Town's MOU. In April 2016, the second permit issued by the EPA was submitted and went into effect July 1, 2018. This article addresses some of the requirements for NPDES.

Future Projects (prioritization pending analysis) :

- Walker Pond
- Farley Pond
- Forbes Pond
- Sabrina Lake
- Wildwood Pond
- Sportsman's Pond

Capital Request Detail					
Project Title	Drain System Improvement	Fiscal Year	2022	Request Status	Existing
Project Phase	Design/Engineering			FF&E	
Useful Life	More than 20 Years			Technology	
Primary Function	Wastewater Resources			Other Expenses	
Budget Impact	May increase annual operating expenses by less than \$5,000			Project Cost	\$262,000
Parameters					
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?					
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?					
3. Does this project require any permitting by any Town or State agency?					
4. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?					
5. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?					
6. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?					
7. Is this a request in response to a Court, Federal, or State order?					
8. Is this a request in response to a documented public health or safety condition?					
9. Is this a request to improve or make repairs to extend the useful life of a building?					
10. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?					
11. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?					
12. Will any other department be required to provide assistance in order to complete the project?					
13. If funded, will this project increase the operating expense for any other department?					
14. If funded, will additional permanent staff be required, and if so what is the total number of FTE's?					
Total New FTE's					0
Project Description and Considerations					

The Town Reservoir Sediment Removal

The sediment at the bottom of the reservoir is contaminated and must be removed. This is a category 5 impaired water body under NDPES. Category 5 is the worst rating a water body can receive from the EPA.

The Town will engage a designer to determine the best way to remove the sediment. This funding request is for the design phase of the project. The funding for the construction phase will be requested in FY2023.

Clarification of Questions

3. Conservation Commission, State, and Federal permitting may be required for dredging.
6. Yes, this is a project for which an Initial Eligibility Project Application may be filed with the Community Preservation Committee.

Capital Request Detail					
Project Title	Fiscal Year		2023	Request Status	
Project Phase	Construction	Planning/Design		FF&E	Existing
Useful Life	More than 20 Years	Land		Technology	
Primary Function	Wastewater Resources	Site Preparation		Other Expenses	
Budget Impact	May increase annual operating expenses by less than \$5,000	Project Cost	Source	Project Cost	
Parameters					
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?					
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?					
3. Does this project require any permitting by any Town or State agency?					
4. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?					
5. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?					
6. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?					
7. Is this a request in response to a Court, Federal, or State order?					
8. Is this a request in response to a documented public health or safety condition?					
9. Is this a request to improve or make repairs to extend the useful life of a building?					
10. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?					
11. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?					
12. Will any other department be required to provide assistance in order to complete the project?					
13. If funded, will this project increase the operating expense for any other department?					
14. If funded, will additional permanent staff be required, and if so what is the total number of FTE's?					
				Total New FTE's	0
Project Description and Considerations					

The Town Reservoir Sediment Removal

The sediment at the bottom of the reservoir is contaminated and must be removed. This is a category 5 impaired water body under NDPES. Category 5 is the worst rating a water body can receive from the EPA.

The Town will engage a designer to determine the best way to remove the sediment. This funding request is for the construction phase of the project. The funding for the design phase was requested in FY2022.

Clarification of Questions

3. Conservation Commission, State, and Federal permitting may be required for dredging.

6. Yes, this is a project for which an Initial Eligibility Project Application may be filed with the Community Preservation Committee.

CPC USE ONLY:	
Application #	FY22-11
Qualifies:	_____
Does not qualify:	_____

INITIAL ELIGIBILITY PROJECT APPLICATION FORM

DUE BY DECEMBER 4, 2020

TOWN OF NEEDHAM COMMUNITY PRESERVATION COMMITTEE

www.needhamma.gov/CPC

Email Applications to:

Carys Lustig and Kristen Wright:

clustig@needhamma.gov & kwright@needhamma.gov

- Applicant:** Town Manager, Select Board, Conservation Comm., Park & Recreation Comm. **Submission Date:** 12/01/2020
- Applicant's Address, Phone Number and Email:**
 1471 Highland Avenue
 Needham, MA 02492
 (781) 455-7500
Contact Name:
 Kate Fitzpatrick, Town Manager
- Purpose:**
 (Please select all that apply)
☒ Open Space
☐ Community Housing
☐ Historic Preservation
☐ Recreation
- Project Name:** Preservation of Open Space - Purchase of Land
- Project Location/Address/Ownership (Control):**
 To be determined
- Amount Requested:** \$ TBD
- Estimated Total Project Cost (If Different):** \$ 1,000,000
- Critical Dates: (If Applicable)**

- continued -

CPC USE ONLY:	
Application #	FY22-11
Qualifies:	_____
Does not qualify:	_____

Project Name: Preservation of Open Space - Purchase of Land

9. Project Summary: In 100 words or less provide a brief summary of the project:

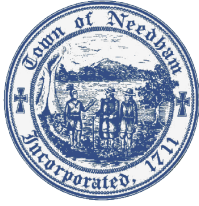
The Town Manager/Select Board, the Park and Recreation Commission, and/or the Conservation Commission hold discussions throughout the year regarding the possible purchase of land or easements on private property. All three boards have developed a list of specific parcels that would be beneficial for acquisition. CPA funds have been used, in the past, to purchase two parcels on Carol Road and Brewster Road, as well as the parcel at 174 Charles River Street, adjacent to Walker-Gordon Field.

10. Community Need: In 100 words or less provide a brief statement of the need for and the benefits to the community.

No specific parcel has been identified at this time, but the request has been submitted, in the event that an opportunity becomes available.

Recent customer satisfaction surveys completed by Needham residents indicate strong support for the Town's open spaces and trails. The Town Manager and boards will continue to strive to provide access to land and trails through the purchase or donation of easements of lands.

Note: *This application enables the Community Preservation Committee to review the request to assess eligibility. You shall be notified by January 1 of your eligibility. If eligible you will be requested to supply additional information by February 1.*



**Select Board
TOWN OF NEEDHAM
AGENDA FACT SHEET**

MEETING DATE: 12/22/2020

Agenda Item	Committee Reports
Presenter(s)	Board Discussion

1.	BRIEF DESCRIPTION OF TOPIC TO BE DISCUSSED
<i>Board members will report on the progress and / or activities of their Committee assignments.</i>	
2.	VOTE REQUIRED BY SELECT BOARD
3.	BACK UP INFORMATION ATTACHED
(Describe backup below)	
None	

**Town of Needham
Water Sewer Billing System
Adjustment Form**

DEPARTMENT OF PUBLIC WORKS

TO: TOWN TREASURER AND COLLECTOR
cc: TOWN ACCOUNTANT, WATER AND SEWER SUPERINTENDENT

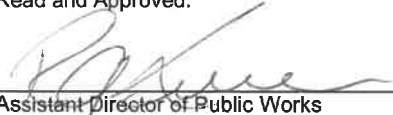
WHEREAS the appropriate divisions of the Department of Public Works have submitted to you the following commitment(s) on the dates listed below for the collection of water, sewer revenue and

WHEREAS certain inadvertent error(s) were made in said commitment(s), it is hereby requested that you abate these particular account(s) in the amount(s) stated below.

Water Sales:	-\$206.10
Water Irrigation:	\$0.00
Water Admin Fees	\$0.00
Sewer Sales:	-\$594.66
Transfer Station Charges:	\$0.00
Total Abatement:	-\$800.76

Order #: 1301

Read and Approved:


Assistant Director of Public Works

12/16/2020

For the Select Board

12/22/20

Carys Lustig 12/16/2020
Interim Director of Public Works

**Town of Needham
Water Sewer Billing System
Adjustment Form**

Prepared			Customer	Location	Street	Irrigation	Domestic	Sewer	Total	Reason	Corrected
By:	Last Name	First Name	ID#	ID#	Number						Last Read
JO	Council on Aging	(2)				\$0.00	-\$206.10	-\$594.66	-\$800.76	COA	N
Total:									-\$800.76		

ALSO, LET THIS SERVE AS AUTHORIZATION TO ABATE ANY PENALTY OR INTEREST WHICH HAS ACCRUED DUE TO THE NON-PAYMENT OF AMOUNTS AS STATED ABOVE.

Legend:

O.I. = O.I. reading slower than inside meter causing large bill when inside meter is read.
 TWN = Town Project caused damage to private property
 EC = Extenuating Circumstances
 Equip = Equipment Malfunction
 UEW = Unexplained water loss
 ACC = Accidental Water Loss
 BP = Billing Period beyond 100 days
 COA - Council on Aging

Town of Needham
Select Board
Minutes for Tuesday, November 24, 2020
<https://us02web.zoom.us/j/83560996922>

5:00 p.m. Executive Session: Exception 6 - Acquisition of Real Property
A meeting of the Select Board was convened by Chair Maurice P. Handel. Those present were Matthew D. Borrelli, Marianne B. Cooley, Daniel P. Matthews, John Bulian, and Town Manager Kate Fitzpatrick. Also attending were Dave Davison, ATM/Finance and Katie King ATM/Operations. Recording Secretary Mary Hunt joined the meeting at 6:00 p.m.

Motion by Mr. Borrelli that the Select Board vote to enter into Executive Session under Exception 6 - To consider the purchase, exchange, lease, or value of real property if the chair declares that an open meeting may have a detrimental effect on the negotiating position of the public body.

Second: Mr. Bulian. Unanimously approved 4-0 by roll call vote. (Ms. Cooley joined the meeting after the vote).

5:45 p.m. Informal Meeting with Citizens: No Activity.

6:00 p.m. Call to Order:
The public portion of the Select Board meeting of November 24, 2020, was convened by Chairman Maurice Handel.

Mr. Handel announced this open meeting is being conducted remotely consistent with Governor Baker's Executive Order of March 12, 2020 due to the current state of emergency from the outbreak of the COVID-19 virus. He noted all public gatherings have been suspended as advised and directed by the Commonwealth. And, as such, suspending the requirement of the open meeting law to have all meetings in a public, accessible, physical location while encouraging and allowing members of all public bodies to participate remotely. Mr. Handel stated the meeting will not include public comment and the Needham Select Board and all attendees are convening by Zoom, as posted on the Town's website identifying how the public may join. He said all supporting documents used at this meeting are available on the Town's website www.needhamma.gov.

Motion by Mr. Bulian that this meeting be continued to the Select Board's next scheduled meeting on Tuesday, December 8, 2020, if a technical problem develops that makes it impossible for the Select Board to conduct the meeting in this format.

Second: Mr. Borrelli. Unanimously approved 5-0 by roll call vote.

6:02 p.m. Appointments and Consent Agenda:

Motion by Mr. Bulian that the Select Board vote to approve the Appointments and Consent Agenda as presented.

APPOINTMENTS

- 1. Water & Sewer Rate Structure Committee Harold Burger (term expires 6/30/2023)**

CONSENT AGENDA

- 1. Accept a \$100 donation made to the Needham Aging Services Donation Account from Nancy and Jon Schneider, Needham residents.**
- 2. Approve a 20B Exemption for Lulu Tsai who is an employee in the Needham School Department as an Instructor to engage in work with the Aging Services Department as an activity instructor.**
- 3. Water & Sewer Abatement Order #1299.**
- 4. Accept the following donations made to the Needham Health Division's Gift of Warmth Program: \$10,000 from the Needham Community Council; and \$250 from Mary Clare Siegel, a Needham resident.**
- 5. Accept a \$100 donation made to the Needham Aging Services Donation Account from Ruth & Paul Richards, Needham residents.**
- 6. Approve minutes of November 9, 2020 (open session) and November 10, 2020 (executive session).**

Second: Mr. Borrelli. Unanimously approved 5-0 by roll call vote.

6:03 p.m.

School Master Plan Presentation:

Dan Gutekanst, Superintendent of Schools, Steve Popper Director of Design & Construction, Hank Haff, Senior Project Manager, Stuart Chandler, Chair, PPBC, Don Walter, Dore & Whittier, Michele Rogers, Dore & Whittier, Jason Boone, Dore & Whittier presented the final School Master Plan Report to the Select Board. Anne Gulati, Assistant Superintendent/Finance and Operations, Andrea Longo-Carter, Chair, School Committee, and Connie Barr, School Committee also participated on the call.

Dr. Gutekanst told the Board two presentations tonight include a facilities master plan and a renovation plan for the Emery Grover Building. He stated the plans, if implemented, total approximately \$280 million in construction for Needham schools and the Town of Needham. He said these projects, discussed for many years, now have numbers, ideas, and timelines to consider. Dr. Gutekanst commented on renovation of the Emery Grover building, Mitchell School, Pollard Middle School, as well as long term goals of the school committee. He recognized this is the first of many conversations in achieving the goal, noting the options voted on by the school committee for the community to consider are efficient and cost effective, even though the dollar amount is extraordinary and is an appropriation request more than the community has ever considered for school building projects.

Don Walter, Dore & Whittier, Michele Rogers, Dore & Whittier, Jason Boone, Dore & Whittier presented the School Master Plan. A PowerPoint presentation titled “Needham School Master Plan Project Update” dated November 24, 2020.

Mr. Walter commented on the history/process including visiting buildings, reviewing enrollment projections and capacity needs, capital needs, and cost estimates.

Ms. Rogers discussed a graph commenting on the existing educational space needs and physical conditions within all Needham schools. She commented on capital improvement cost estimates for both Pollard Middle School (approximately \$40 million) and Mitchell Elementary School (\$25 million). She discussed what would be included and not included for each cost.

Mr. Boone told the Board of seven possible identified solutions. He commented on the three final options that made the “short list” including the status quo grade configuration, discontinuance of High Rock, and High Rock 6th Elementary School. Renderings of each school option were viewed.

Ms. Rogers commented on the master plan sequences with 2020 cost estimates in each of the top three scenarios with four options, noting timelines reflect 2020 costs escalated at 4.5%/year and do not include MSBA participation.

Hank Haff commented on a modified approach should the Town choose or need to delay the implementation of Option D, which is a lower cost first step, but an important first step in achieving the long-term goals.

6:35 p.m.

Emery Grover Presentation:

Dr. Gutekanst suggested discussion continue on the Emery Grover plan prior to taking questions. Joel Bargmann, Architect, Bargmann Hendrie & Archetype, Inc., joined the discussion.

Mr. Bargmann explained the process of exploring ways to provide the school administration with modern facilities began over a year ago. He acknowledged the working group and the PPBC. A PowerPoint presentation titled “Needham School Administration Emery Grover Building Study,” dated November 24, 2020 was viewed.

Mr. Bargmann commented on the historical significance of the Emery Grover building and that it is listed in the Nation Register of Historic Places. He also discussed initial studies, summarized and showed renderings of six preliminary options, summarized the three final options, and analysis and conclusions. He commented the three final options meet the school administration’s program needs and present different opportunities to address parking challenges. Mr. Bargmann commented on cost comparisons backed up by cost estimates, as prepared by an independent cost analysis firm. Mr. Bargmann noted the significant decline of the

building includes a leaking roof, non-functioning systems, non-functional windows, and sagging stairs.

Hank Haff reviewed the project schedule beginning with design and construction funding, leading to project completion in May 2025.

Mr. Bargmann discussed Option 3 and why a rotated addition at the rear of the Emery Grover building is the preferred option. He summarized Option 3 allows the Town to save the Emery Grover building as a gateway to town center, saves one of the oldest buildings in Needham, is the best compromise between preservation, department needs, parking, and allows for the best natural light/window ratio, including natural ventilation opportunities. He reviewed construction costs for each option, saying Option 3 (preferred) is the highest cost option offering the best building. Mr. Bargmann commented on why CPA funds are appropriate for this project.

Dr. Gutekanst acknowledged a lot of information has been presented and asked the Select Board if it had any questions.

Mr. Handel asked the cost for a school administration building on a clean site compared to renovation of Emery Grover?

Joel Bargmann said a new building would be approximately \$25 million, depending on site work.

Andrea Longo-Carter reiterated the totality of the projects is a large sum of money over quite a bit of time, but the option presented will best meet the school needs in a cost-effective manner for the Town. She acknowledged this is the first of many conversations in determining the best path forward.

Mr. Bulian commented on the dollar amount. He asked Mr. Davison about the Town's 10% debt capacity at this time and how much is left on the Sunita Williams school to bond? He commented on bonding the new public safety buildings and Emery Grover building.

Discussion ensued on a financing summary update, anticipated in late winter at the time of formulating the annual Town Meeting warrant, the Williams school, debt service of all projects to date, cost per square foot for renovations vs. new construction.

Mr. Borrelli commented on swing space, off-site parking, demolition costs, and rental cost per sq. ft.

Mr. Matthews said the presentation is a good starting point. He said the key issue for Emery Grover is simply "Does the public value the building as a historic and iconic structure worth investing a premium cost?" He commented if \$27 million

dollars is going to be invested in renovating the building it must be for Town use, acknowledging other challenges and demands on Town resources. Mr. Matthews commented on the functional use of the High Rock School, suggesting school enrollment must be tracked for any decision and that changes in zoning and housing policies may add more students to the system in the next 5-10 years.

Discussion ensued on renovations of Emery Grover, potential use of the building if it is not used by the school administration, reverting the High Rock School to an elementary school, cost projections, and potential increases in taxes.

Ms. Cooley commented on changes in student population over the next decade. She noted the current High Rock School works well, noting the shift in thinking about its function. She said the price tag is challenging. She said she supports recommendations that provide the greatest flexibility, as the state housing situation has the potential to be highly disruptive for Needham.

Dr. Gutekanst commented there may be efficiencies to be gained by bringing the 6th grade into a building where cafeteria, gyms, and auditoriums are shared.

Mr. Handel said everyone is concerned about the magnitude of the plan, noting there are not unlimited resources. He commented that finding a buildable site for school administration may produce a very different building, rather than putting it in a prominent place that reflects the significance of our civic center in the downtown.

Dr. Gutekanst concluded the MSBA must be part of the conversation. He pointed out that decisions must be made sooner rather than later, as the Emery Grover building is no longer sustainable. He advocated for abandoning the building soon, as the School Administration cannot stay in the building much longer. He said Pollard Middle School and Mitchell School have significant needs and cannot languish for years.

7:36 p.m.

Town Manager:

Kate Fitzpatrick, Town Manager spoke with the Select Board regarding six items:

1. Termination and Release of Easement - Mill Creek

Ms. Fitzpatrick recommended the Select Board approve the Termination and Release of Easement for the Mill Creek (Modera Needham) project on Greendale Avenue.

She commented the developer of Modera Needham received a Comprehensive Permit issued by the Zoning Board of Appeals to allow the development of its project on Greendale Avenue. After the developer relocated the Town's sewer line at its own expense, the Select Board authorized the developer to encroach on the existing sewer easement to construct the facility. The 2019 Annual Town Meeting, under Article 48, authorized the Select Board to extinguish the easement running

from Greendale Avenue to the Route 128 Right-of-Way. The Department of Public Works has confirmed that all necessary work is complete to the satisfaction of the Town.

Motion by Mr. Bulian that the Select Board approve and authorize the Town Manager to sign the Termination and Release of Easement.

Second: Mr. Borrelli. Unanimously approved 5-0 by roll call vote.

2. Proposed MBTA Service Cuts

Ms. Fitzpatrick updated the Board on proposed service cuts at the MBTA and recommended that the Board submit a letter during the comment period expressing the Town's concerns. She noted changes could impact Bus 59, Saturday service, the number of trains, service ending at 9:00 p.m., and the elimination of the layover facility in Needham.

Discussion ensued on the value of the MBTA for people who live and work in Needham, particularly once the pandemic is over.

Motion by Mr. Bulian that the Select Board authorize the Town Manager to send a letter to the MBTA expressing concerns about the proposed reductions in service and potential disruptions in system reliability associated with the current proposal.

Second: Mr. Borrelli. Unanimously approved 5-0 by roll call vote.

Ms. Cooley suggested the Town Manager use the "notify me" system to encourage citizens who use the commuter rail to craft their own letter and ask large employers for data on how important the bus and train service is to them.

Mr. Matthews said the issue is difficult, noting public transportation is a core service and affects current and future town planning. He noted it would be difficult to bring services back once reduced.

3. Minuteman School Fields Project & CARES Funding Request

Ms. Fitzpatrick reminded the Board the original plan for the Minuteman School Building and Campus project was a fully designed full build out of an Athletic complex located on the Lexington site of the old building, which has been torn down. The Athletic Complex was not eligible for MSBA funding and was held until the building project was complete. The Base project includes: multi-sport synthetic turf stadium field & equipment; asphalt walking track & spectator fencing; synthetic turf softball/ multi-use field, dugouts, bullpens, & batting cage; synthetic turf baseball/ multi-use field, dugouts, bullpens, & batting cage; emergency vehicle access & visitor vehicle drop-off/ pick-up loop; accessible walkways, safety netting, & spectator viewing areas; maintenance equipment; and scoreboards & utilities for each field. The approved alternates include stadium field lighting; softball/ multi-use field lighting; baseball/ multi-use field lighting; competitive running track and track events; non-fixed track equipment; and perimeter fencing.

She said at its meeting this week, the Minuteman School voted to authorize borrowing in the amount of \$1,900,000 for the project. She said now that the Minuteman School Committee has voted to borrow the funds and has notified each District community, the District members have 60 days to call a Special Town Meeting to disapprove Minuteman's borrowing. If there is no such vote, then the borrowing is deemed approved by that community. She said the expected first year assessment for the Town of Needham is \$15,915. Ms. Fitzpatrick also told the Board the Minuteman School has requested funding from the CARES Act ("CvRF") to support expenses related to COVID-19. She noted regional vocational schools were not eligible to receive the pass-through Federal funds. Ms. Fitzpatrick said Minuteman has requested \$12,613.55 to support Needham students. A reserve fund transfer from the Finance Committee would be required for the Town to make this payment before the December 30, 2020 deadline.

Motion by Mr. Bulian that the Board vote to:

1. Approve the Minuteman School Debt Issuance for the Completion of the field component of the School Building Project; and

2. Approve a request from the Minuteman School for \$12,613.55 from the Town's allocated CvRF Municipal Fund and endorse a Reserve Fund Transfer Request to provide the funding to the Minuteman School in advance of reimbursement from the Commonwealth.

Second: Mr. Borelli. Unanimously approved 5-0 by roll call vote.

Mr. Matthews noted the Minuteman School is fully enrolled for the next incoming class and has a waiting list.

Ms. Cooley said the fields project has been fully vetted and is the right project for the school. She said she is delighted knowing the school is fully enrolled, with increasing participation from Needham.

4. Preliminary FY2022 - FY2026 Capital Improvement Plan

Ms. Fitzpatrick discussed with the Board the preliminary FY2022 cash capital and debt financed project submissions. She said the FY 2023 – 2026 projects will be discussed at the Select Board meeting on December 8th and final approval of the Capital Improvement Plan will be sought on December 22nd.

Ms. Fitzpatrick highlighted a few of the funding recommendations including Emery Grover, Mitchell School, and Pollard project, Defibrillator and Self-Contained Breathing Apparatus for the Public Safety department, Pollard School Feasibility Study, Public Works Facilities Improvements, and the Ridge Hill building demolition.

5. Budget Priorities

Ms. Fitzpatrick reviewed proposed budget priorities for the FY2022 Operating and Capital Budget. She referred to “Select Board Budget Priorities for Fiscal Year 2022,” dated 11/24/2020. She noted the primary goal is maintenance and optimization of existing Town services during a pandemic along with the financial, social, and economic crises. In addition, mindful of the availability of revenue for appropriation, the Board has set the following priorities:

- a. Support for items that contribute to the achievement of Town wide goals and objectives, including recovering from COVID-19 and advancing racial equity in Needham.
- b. Support for the continuation of the Public Information Officer position.
- c. Support for a five to ten-year plan for the renovation, reconstruction and/or preservation of the Town’s capital assets in the most prudent, realistic, and efficient manner, including continued investment in buildings infrastructure, and fleet maintenance.
- d. Support for initiatives that contribute to financial sustainability, including the maintenance of a debt service plan that balances capital needs with the Town’s ability to pay, identification of alternative funding sources for traditional cash capital needs, evaluation of financing alternatives, and alignment of capital and maintenance needs with appropriate funding sources.
- e. Support for initiatives aimed at achieving greater coordination and efficiency among Town departments and providing adequate resources to address identified service delivery and general administrative needs of the Town in a cost-effective manner.
- f. Support for a funding mechanism for mandated water quality (stormwater) expenses.

The Board thanked Ms. Fitzpatrick for the review of proposed budget priorities.

6. Town Manager’s Report

Ms. Fitzpatrick reported the Newton Needham Regional Chamber has put out a list of the 50 most influential business owners of color, noting many people on the list live or work in Needham.

Ms. Fitzpatrick said the Blue Tree will be lit the weekend after Thanksgiving.

8:10 p.m. Board Discussion:

1. Preliminary Discussion FY2021 - FY2022 Goals

Ms. Fitzpatrick said a number of goals are in response to the COVID-19 pandemic and race equity. She referred to “FY2021-FY2022 Select Board Goals Adopted,” highlighting new items including working with utility companies to improve coordination, working to keep businesses open and attract new businesses in light of the pandemic, exploring the option of implementing an organics recycling program for the community, discussing oversight and reports needed for public safety, reviewing the composition, structure and charge of two to three committees, and reviewing the operations and long-term service delivery model at the RTS.

2. Committee Reports

Ms. Cooley reported the downtown economic working group continues to meet. She commented on “pick up” zones for restaurant take out and store merchandise during the winter months, and on outdoor dining in the Chapel Street parking lot. She noted merchants were thrilled to hear sidewalks will now be cleared after a snowstorm due to the recent purchase of additional equipment. She reported some restaurants will continue to provide table service outside, but not during a storm.

Ms. Cooley reported the Needham Unites Against Racism Initiative (NUARI) working group met last Monday focusing on the creation of its vision. She said the group is eager to get to work creating an environment where all citizens can feel successful and welcome. She commented on the group facilitator Lisa Smith McQueenie.

Mr. Borrelli said the issue is complex and the good group of people are not shy about “putting themselves out there.”

Discussion ensued on restaurants using outside heaters and guidelines provided by the Town.

Mr. Matthews said the draft goals document is very good, noting additional responsibilities this year related to the COVID -19 pandemic and race equity.

Ms. Cooley suggested adding a goal of redefining the role of the Needham Human Rights Committee. She said a variety of work from NUARI will fit within the interest of the Human Rights Committee.

Ms. Cooley commented on oversight of public safety, vehicular accident and pedestrian safety, which she said should be looked at regularly.

The Board wished the community a Happy Thanksgiving.

8:25 p.m.

Adjourn:

Motion by Mr. Bulian that the Select Board vote to adjourn the Select Board meeting of Tuesday, November 24, 2020.

Second: Mr. Borrelli. Unanimously approved 5-0 by roll call vote.

A list of all documents used at this Select Board meeting is available at:

<http://www.needhamma.gov/Archive.aspx?AMID=99&Type=&ADID=>

Town of Needham
Select Board
Joint Meeting with School Committee & Finance Committee
Minutes for Tuesday, December 1, 2020
<https://us02web.zoom.us/j/83560996922>

5:00 p.m. Executive Session: Exception 6 - Acquisition of Real Property
A meeting of the Select Board was convened by Chair Maurice P. Handel. Those present were Matthew D. Borrelli, Marianne B. Cooley, Daniel P. Matthews, John Bulian, Town Manager Kate Fitzpatrick and Town Counsel Chris Heep.

Motion by Mr. Bulian that the Select Board vote to enter into Executive Session under Exception 6 - To consider the purchase, exchange, lease, or value of real property if the chair declares that an open meeting may have a detrimental effect on the negotiating position of the public body and not to return to open session prior to adjourning.

Second: Mr. Borrelli. Unanimously approved 5-0 by roll call vote.

Town of Needham
Select Board
Minutes for Tuesday, December 8, 2020
<https://us02web.zoom.us/j/830124974485>

5:45 p.m. Informal Meeting with Citizens: No Activity.

6:00 p.m. Call to Order:

A meeting of the Select Board was convened by Chair Maurice P. Handel. Those participating were Matthew D. Borrelli, Marianne B. Cooley, Daniel P. Matthews, John A. Bulian, Town Manager Kate Fitzpatrick, Dave Davison, ATM/Finance, Katie King, ATM/Operations, and Sandy Cincotta, Support Services Manager. Recording Secretary Mary Hunt recorded the meeting remotely.

Mr. Handel announced this open meeting is being conducted remotely consistent with Governor Baker's Executive Order of March 12, 2020 due to the current state of emergency from the outbreak of the COVID-19 virus. He noted all public gatherings have been suspended as advised and directed by the Commonwealth. And, as such, suspending the requirement of the open meeting law to have all meetings in a public, accessible, physical location while encouraging and allowing members of all public bodies to participate remotely. Mr. Handel stated the meeting will include public comment and the Needham Select Board and all attendees are convening by Zoom, as posted on the Town's website identifying how the public may join. He said all supporting documents used at this meeting are available on the Town's website www.needhamma.gov.

Motion by Mr. Bulian that this meeting be continued to the Select Board's next scheduled meeting on Tuesday, December 22, 2020, if a technical problem develops that makes it impossible for the Select Board to conduct the meeting in this format.

Second: Mr. Borrelli. Unanimously approved 5-0 by roll call vote.

6:02 p.m. Tax Property Classification Hearing:

Chip Davis, Director of Assessing and members of the Board of Assessors including Walter McDonough, Stanley Winston, and Arthur Tzouros spoke with the Board regarding the allocation of the fiscal year 2021 tax levy among the various classes of property in Town.

Mr. McDonough read a prepared statement saying the third quarter of FY2021 will be the first tax bill that has produced usable values from the new Tyler Technologies IAS CAMA software. He noted it is the capstone to a project that has been underway since the downsizing of the Department of Revenue's Division of Local Services several years ago. He said overall, the average change in value for all types of real estate in the conversion was less than 1%. He commented the efforts of the entire assessing staff through all of 2019 and 2020 led to this result, which was well below the 2.5% discrepancy rate called for in the conversion

contract. He said Needham's conversion accuracy was extensively reviewed by the DOR staff throughout the summer and early fall. He said Needham is beginning to see tangible feedback from the "small house" zoning changes instituted two years ago. He noted that while some builders appear to have changed their game; in that they are now buying older homes to upgrade, add to, and sell as what could be termed "semi new construction"; the teardown/rebuilt cycle has not abated. He said if the current sales price boom for all new construction continues, it appears, the new zoning regulations will have no detrimental effect on the market. Mr. McDonough said in what could be termed a "more lucky than good" move, the Assessing Department contracted with a new vendor to gather field data on residential new construction. He said the fact that this vendor was in place prior to the onset of the current health crisis proved to be a godsend, in light of the fact, that the technology that they employed allowed complicated properties to be measured without actually getting close to the property. Additionally, he said to track interior renovations, normally updated by onsite inspections, the office innovatively shifted gears yet again by sending letters to homeowners asking that they respond as to the progress on the projects underway. He said this effort will hopefully avoid a diminution of new growth going forward, in spite of the pandemic restrictions on the staff.

Mr. McDonough commented on Needham Crossing projects on the horizon, in addition to the planned revitalization and expansion of the Avery Manor property which he said bodes well for the continued expansion of the personal property account inventory. Unfortunately, he said, the Town has already been advised that the number of smaller accounts will become economic victims of the virus. He said values of established commercial properties moved slightly upward, for the seventh year in a row, in what for calendar 2019 appeared to be a stable commercial/industrial sector.

Mr. McDonough said FY2022 will undoubtedly tell a different story. He noted FY21 values are based on calendar 2019 economic activity, but FY2022 values will be based on CY2020 activity. He said that while many landlords will be cushioned by leases that obligate 2020 payments from their tenants, there will surely be necessary economic concessions made to retain tenants going forward. He said the effects of these possibilities are not predictable at this time, but what is certain is that properties that function as service businesses such as hotels will require severe downward adjustments based on the pandemic induced reduction attributable to the property. He credited staff, working in a combined onsite/remote environment, with meeting all benchmarks in all areas of assessment operations.

Mr. Handel invited public comment. No comments were heard.

Ms. Cooley said a comment was received ahead of the meeting by someone asking the Board to move the maximum amount to commercial properties, if possible. She noted a formula is in place that does move a significant portion of the tax burden to

commercial properties. She acknowledged the burden on commercial property owners, who are also facing a challenging time.

Mr. Borrelli suggested it may be a time to consider a shift back from commercial properties. He said there may or may not be a way to help the commercial property owners.

Mr. Matthews spoke about the history of annually meeting with the Assessors. He commented on the legal and technical decisions regarding the surcharge the Select Board will place on commercial assessed properties vs. residential properties. He commented on the maximum allowable shift and its effect on businesses, noting the Town has been creative in its thinking and provided some relief, but more needs to be done. He suggested the maximum allowable shift is not the right tool to use to help businesses.

Mr. Bulian read a letter from a resident saying the level of taxes are becoming unaffordable. He concurred residential taxes have been going up too fast, noting a year ago he spoke about slowing the rate. Mr. Bulian pointed out the pandemic has shown that people need food and help, and it is a tough time for everyone.

Mr. Borrelli suggested Select Board members keep an open mind as to the shift.

Mr. Handel said it makes sense to review the shift, noting equity is key.

Motion by Mr. Matthews that the Select Board establish a residential factor of 0.8861 for the purposes of setting the Fiscal Year 2021 tax rates.

Second: Mr. Borrelli. Unanimously approved 5-0 by roll call vote.

6:23 p.m. Appointments and Consent Agenda:

Motion by Mr. Bulian that the Select Board vote to approve the Appointments and Consent Agenda as presented.

APPOINTMENTS

- 1. Needham Cultural Council Joni Schockett (term expires 6/30/2023)**
- 2. Needham Cultural Council Bala Muthukaruppan (term expires 6/30/2023)**
- 3. MBTA Advisory Board Duncan Allen (term expires 6/30/2023)**

CONSENT AGENDA

- 1. Approve for calendar year 2021 requests for license renewals of Restaurant – All Alcoholic Licenses for each of the following establishments (subject to receipt of required completed paperwork):**
 - Zucchini Gold, LLC d/b/a The Rice Barn**
 - Bertucci's Restaurants, LLC d/b/a Bertucci's**
 - Henry Hospitality Inc. d/b/a The James**
 - Mount Blue Two, LLC d/b/a Blue on Highland**
 - New Garden, Inc. d/b/a New Garden Restaurant**

- TDRG Needham, Inc. d/b/a Cook Needham
 - Fusion Cuisine, Inc. d/b/a Gari
 - Sol Soul Family Foods, LLC d/b/a Hearth Pizzeria
 - SAI Restaurants, Inc. d/b/a Masala Art
 - Fu Yuan, Inc. d/b/a Fuji Steak House
 - Low and Zhang Co. d/b/a Mandarin Cuisine Locus
 - Eat Farmhouse LLC d/b/a The Farmhouse
 - Needham Food and Beverage LLC d/b/a The Heights
 - Capella LLC d/b/a Cappella • Spiga, LLC d/b/a Spiga
 - Latin-A Group LLC d/b/a Latina Kitchen and Bar
 - Poet King Restaurant Group LLC. d/b/a Hungry Coyote
 - Pancho's Taqueria Needham, LLC d/b/a Pancho's Taqueria
2. Approve for calendar year 2021 request for license renewal of Restaurant – Wine and Malt Beverage License for the following establishment (subject to receipt of required completed paperwork):
 - French Press LLC d/b/a French Press Bakery & Café
 3. Approve for calendar year 2021 requests for license renewals of Package Stores- All Alcoholic Beverages for the following establishments (subject to receipt of required completed paperwork):
 - Innovative Distributing Concepts, LLC d/b/a Bin Ends
 - Lianos Liquors, LLC d/b/a Needham Center Wine & Spirits
 - Needham Wine & Spirits, LLC d/b/a Needham Wine & Spirits
 - Reveler Beverage Company, LLC d/b/a Reveler Beverage
 - vinodivino 3, LLC d/b/a vinodivino
 4. Approve for calendar year 2021 requests for license renewals of Package Stores- Wine and Malt Beverages for the following establishment:
 - Volante Farms
 5. Approve for calendar year 2021 request for Innholder – All Alcoholic License Renewal for the following establishments:
 - Needham 365 Bev, LLC. d/b/a Residence Inn
 - Needham Cabot Concessions, LLC d/b/a Sheraton Needham Hotel
 6. Approve for calendar year 2021 requests for license renewals of Club – All Alcoholic Beverage Licenses for the following establishments (subject to receipt of required completed paperwork):
 - The Needham Golf Club • Village Club Building Assoc. Inc.
 - Lt. Manson Carter Post #2498 V.F.W. of U.S.
 7. Approve for calendar year 2021 requests for license renewals of Common Victualler Licenses for the following establishments (subject to receipt of required completed paperwork):
 - Bagels' Best, Inc. d/b/a Bagels' Best Café
 - Bertucci's Restaurants, LLC d/b/a Bertucci's
 - Beth Israel Deaconess – Glover Café
 - Mount Blue Two, LLC d/b/a Blue on Highland
 - C & D Management, Inc. d/b/a Brothers Pizza & Restaurant
 - Coffee and Fresh Bagels Inc. d/b/a Café Fresh Bagel
 - Capella LLC d/b/a Cappella

- Chef Mike's LLC d/b/a Chef Mike's
- North Hill Needham, Inc. d/b/a Central Avenue Café
- LPM Holding Co., Inc. d/b/a Epicurean Feast - Cutler Lake
- 1095, LLC d/b/a Comella's Restaurant
- TDRG Needham, Inc. d/b/a Cook Needham
- Your Other Oven, Inc. d/b/a Domino's Pizza
- Lin and Xie Corp. d/b/a Dragon Chef Restaurant
- ND Donuts d/b/a Dunkin' • ND Donuts d/b/a Dunkin'
- ND Donuts d/b/a Dunkin'
- Eat Farmhouse, LLC d/b/a The Farmhouse
- French Press LLC d/b/a French Press Bakery & Café
- Select Group, Inc. d/b/a Fresco Restaurant
- Fu Yuan, Inc. d/b/a Fuji Steak House
- Fusion Cuisine d/b/a Gari • 1056 Gyro and Kebab House Corp d/b/a Gyro and Kebab House
- Needham Food and Beverage LLC d/b/a The Heights
- Poet King Restaurant Group LLC. d/b/a Hungry Coyote
- Henry Hospitality Inc. d/b/a The James
- Three Sons, Inc. d/b/a Kosta's Pizza & Seafood
- Latin-A Group LLC d/b/a Latina Kitchen and Bar
- Low and Zhang Co. d/b/a Mandarin Cuisine Locus • SAI Restaurants, Inc. d/b/a Masala Art • McDonald's Restaurant – Needham
- D & L Enterprises, Inc. d/b/a Mighty Subs
- The Needham Golf Club, Inc. • International Needham House of Pizza d/b/a Needham House of Pizza
- A New Leaf • New Garden Inc. d/b/a New Garden Restaurant
- Select Pizza d/b/a Nicholas' Pizza
- PAN LLC. d/b/a Panella's Market & Deli
- Boston Bread LLC d/b/a Panera
- Pancho's Taqueria Needham, LLC d/b/a Pancho's Taqueria
- Needham 365 Bev. LLC d/b/a Residence Inn
- Zucchini Gold, LLC d/b/a The Rice Barn
- Needham Cabot Concessions, LLC d/b/a Sheraton Needham Hotel
- Servente Bakery & Café Inc. d/b/a Servente Bakery & Café
- Spiga, LLC • Starbucks Coffee Company
- Sol Soul Family Foods LLC d/b/a Hearth Pizzeria
- Subway of Needham LLC d/b/a Subway
- Yeat Inc. d/b/a Sweet Basil
- H & B Pizza, Inc. d/b/a Sweet Tomatoes Pizza
- Niki Corp. d/b/a Town House of Pizza
- Treat LLC d/b/a Treat Cupcake Bar
- Lt. Manson Carter Post 2498 V.F.W. of U.S.
- Village Club Building Assoc. Inc.
- Volante Farms

8. Approve for calendar year 2021 requests for various license renewals as detailed below for the following establishments (subject to receipt of required completed paperwork):
 - Needham 365 Bev. LLC d/b/a Residence Inn - Innkeeper
 - Needham Cabot Concessions, LLC d/b/a Sheraton Needham Hotel – Innkeeper
 - Olin College – Lodging License
 - Babson College – Lodging License • 7-Eleven – Special Permit (24 hr. retail sale of food)
 - Yeat Inc. d/b/a Sweet Basil – Special Permit (Carry In Beer/Wine)
 - Needham Cabot Concessions, LLC d/b/a Sheraton Needham Hotel – Sunday Entertainment
 - Needham Cabot Concessions, LLC d/b/a Sheraton Needham Hotel – Weekday Entertainment
 - SAI Restaurants, Inc. d/b/a Masala Art – Weekday Entertainment
 - SAI Restaurants, Inc. d/b/a Masala Art- Sunday Entertainment
 - Mount Blue Two, LLC d/b/a Blue on Highland – Weekday Entertainment
 - Mount Blue Two, LLC d/b/a Blue on Highland – Sunday Entertainment
 - New Garden Inc. d/b/a New Garden- Weekday Entertainment
 - Henry Hospitality Inc. d/b/a The James- Weekday Entertainment
 - Henry Hospitality Inc. d/b/a The James- Sunday Entertainment
9. Approve for calendar year 2021 the following requests for Class I & Class II Used Car Dealer Licenses (subject to receipt of required completed paperwork):
 - Auto International Ltd.- Class II • Beth L Auto Sales – Class II
 - Center Automotive – Class II • Chestnut Motors - Class II
 - Copley Motorcars – Class II • Needham Service Center – Class II
 - Muzi Chevrolet – Class I • Muzi Motors, Inc. – Class I
10. Accept the following donations made to the Needham Community Revitalization Trust Fund: \$1000 from Bradley White, \$500 from Edward & Carol De Lemos, \$500 from Heffernan Associates, \$250 from Copley Motorcars, \$250 from Maryruth Perras, \$250 from Needham Florist, \$100 from Karen Beth Hoffman, \$100 from Kate Carter, \$100 from Marianne Cooley, \$100 from Pura Vido, \$50 from Elizabeth Ann Ritvo, \$50 from Ipsit Vahia, \$50 from Jennifer Quinn, \$50 from Patricia Ahern, \$25 from Barbara Levitov, \$25 from Beth Marcus, \$25 from Donna Vello, \$25 from Jean Higgins, \$25 from Jennifer Byrne, \$25 from Maura Casey, \$25 from Patricia Carey, \$20 from Lisa Tran, and \$10 from Joan Schockett.
11. Water and Sewer Abatement Order #1300
12. Accept a \$1,000 donation made to the Needham Health Division's Traveling Meals Program from the Darshana Thakore Family Fund.
13. Approve name change for the Needham Cultural Council to the Needham Council for Arts and Culture.
14. Extend expiration of Spring Licenses from August 31, 2020 to April 30, 2021.

Second: Mr. Borrelli. Unanimously approved 5-0 by roll call vote.

6:25 p.m.

Approve Sale of Notes:

Dave Davison, ATM/Finance and Evelyn Poness, Town Treasurer reviewed the results of the bond anticipation note sale and discussed the upcoming borrowings with the Select Board. Mr. Davison discussed the sale of the note, premium associated with the note, and the projects it will finance. He asked the Select Board to approve the sale, noting the appropriate documents have already been signed electronically.

**Motion by Mr. Bulian that the Select Board vote to approve and sign
Motions A - F listed below:**

Motion A

Move that the Board approve the sale of a \$2,800,000 1.75 percent General Obligation Bond Anticipation Notes (the “Notes”) of the Town dated December 18, 2020, and payable April 15, 2021, to Piper Sandler Co. at par and accrued interest, if any, plus a premium of \$11,396.00.

Motion B

Move that in connection with the marketing and sale of the Notes, the preparation and distribution of a Notice of Sale and Preliminary Official Statement dated November 19, 2020, as revised December 1, 2020, and a final Official Statement dated December 3, 2020, each in such form as may be approved by the Town Treasurer, be and hereby are ratified, confirmed, approved and adopted.

Motion C

Move that the Town Treasurer and the Select Board be, and hereby are, authorized to execute and deliver a significant events disclosure undertaking in compliance with SEC Rule 15c2-12 in such form as may be approved by bond counsel to the Town, which undertaking shall be incorporated by reference in the Notes for the benefit of the holders of the Notes from time to time.

Motion D

Move that we authorize and direct the Town Treasurer to establish post issuance federal tax compliance procedures and continuing disclosure procedures in such forms as the Town Treasurer and bond counsel deem sufficient, or if such procedures are currently in place, to review and update said procedures, in order to monitor and maintain the tax-exempt status of the Notes and to comply with relevant securities laws.

Motion E

Move that any certificates or documents relating to the Notes (collectively, the “Documents”), may be executed in several counterparts, each of which shall be regarded as an original and all of which shall constitute one and the same document; delivery of an executed counterpart of a signature page to a

Document by electronic mail in a “.pdf” file or by other electronic transmission shall be as effective as delivery of a manually executed counterpart signature page to such Document; and electronic signatures on any of the Documents shall be deemed original signatures for the purposes of the Documents and all matters relating thereto, having the same legal effect as original signatures.

Motion F

Move that each member of the Select Board, the Town Clerk and the Town Treasurer be and hereby are, authorized to take any and all such actions, and execute and deliver such certificates, receipts or other documents as may be determined by them, or any of them, to be necessary or convenient to carry into effect the provisions of the foregoing votes.

Second: Mr. Borrelli. Unanimously approved 5-0 by roll call vote.

It was noted Theodora Eaton, Town Clerk is observing the meeting remotely.

6:30 p.m. Director of Public Works:
Carys Lustig, Interim DPW Director spoke with the Select Board regarding three items:

1. Sign Notice of Traffic Regulation Revision - Chestnut Street at Oak Street
Motion by Mr. Bulian that the Select Board vote to approve and sign the Notice of Traffic Regulation Permit #TS20-12-08 for the amendment of existing Traffic Signal Regulation Permit #B-1500a Chestnut Street at Oak Street by eliminating the lag green phase for Chestnut Street northbound.
Second: Mr. Borrelli. Unanimously approved 5-0 by roll call vote.
2. Sign Notice of Traffic Regulation Revision - Central Avenue at Great Plain Avenue
Motion by Mr. Bulian that the Select Board vote to approve and sign the Notice of Traffic Regulation Permit #TS20-12-08a for the amendment of existing Traffic Signal Regulation Permit #B-1652 Central Avenue at Great Plain Avenue by revising the signal timing of the Central Avenue northbound and southbound approach phases and exclusive pedestrian phase.
Second: Mr. Borrelli. Unanimously approved 5-0 by roll call vote.
3. Public Works Snow & Ice Preparation Update
Ms. Lustig provided an update on the Public Works Department’s preparation for the upcoming snow season. She commented on the Town’s snow program and things that may be different this year, due in part, to the pandemic and some challenging market conditions. Discussion ensued on staffing requirements and heavy equipment needed for handling snow. Ms. Lustig spoke about the difficulty attracting contractors to work the snow season, noting turnover and less snow, and that Needham is down about 16 pieces of equipment, much of it heavy equipment. She said for the upcoming season, it is anticipated public safety will still be facilitated during snow events, but not to the level of efficiency in prior years. She

asked residents to be aware of the challenges, knowing a good snow service will still be provided. She commented on new Covid-19 protocols in place, and the new Snow and Ice Pilot program for the downtown.

Mr. Borrelli asked what the protocol is for ice melt on sidewalks at schools, particularly at the high school. Ms. Lustig said salting sidewalks is extremely labor intensive and not usually done unless there is an extreme icing event.

Ms. Cooley asked if the sidewalk snow program can be done in the Heights? Ms. Lustig said the program is limited at the moment and meant to test equipment purchased by the Town. She said it is possible for a more comprehensive program in the future.

6:45 p.m.

Town Manager:

Kate Fitzpatrick, Town Manager spoke with the Board regarding four items:

1. Proposed Snow Removal & Snow Hauling Exemption Legislation

Ms. Fitzpatrick recommended the Select Board authorize the submission of a proposal to exempt snow removal and snow hauling services from the provisions of M.G.L. c. 30B - the Uniform Procurement Act - to the Town's legislative delegation.

Motion by Mr. Borrelli that the Select Board authorize the Town Manager to contact the Town's legislative delegation and propose an amendment to M.G.L. c. 30B to include "snow removal and snow hauling" in the exceptions listed under Section 1(b)(17).

Second: Mr. Bulian. Unanimously approved 5-0 by roll call vote.

2. Heather Lane Definitive Subdivision & Heather Lane Extension Residential Compound and Definitive Subdivision

Ms. Fitzpatrick told the Select Board that the Planning Board required two declarations of restrictive covenants and a conservation restriction as a condition of the Board's approval of the Heather Lane Definitive Subdivision Plan and the Heather Lane Extension Residential Compound and Definitive Subdivision Plan. It was noted Select Board approval and execution of these items is required for them to be operative. The documents have been reviewed and approved by Town Counsel. She asked for the Select Board's approval.

Motion by Mr. Bulian that the Select Board approve and sign the Heather Lane Declaration of Restrictive Covenants dated December 1, 2020; the Heather Lane Extension Declaration of Restrictive Covenants date December 1, 2020; and the Heather Lane Conservation Restriction to Town of Needham, Massachusetts dated December 1, 2020.

Second: Mr. Borrelli. Unanimously approved 5-0 by roll call vote.

3. Preliminary FY2022 - FY2026 Capital Improvement Plan

Ms. Fitzpatrick and Dave Davison, Assistant Town Manager/Finance discussed with the Board the preliminary FY2022 - FY2026 Capital Improvement Plan. It was noted a vote on the final plan is scheduled for December 22nd.

Ms. Fitzpatrick commented on recommendations in tier 1 of the CIP proposed for funding through tax levy, debt, and warrant articles. She said the FY2022 submission was amended for the completion of the public safety buildings, not included in the prior version. She said it is a work in progress and updated information on costs associated with the project are expected in early February. Ms. Fitzpatrick commented on items awaiting further study including the schools master plan, public works facility, and the Emery Grover building. She told the Board, absent a decision on the Emery Grover building, improvements will need to be performed at the building.

4. Town Manager's Report

Ms. Fitzpatrick asked Katie King, ATM/Operations for an update on the Over Zero workshop.

Ms. King commented on the Over Zero workshop held online. She said 51 people gathered on Zoom over the last 3 Tuesdays and included a broad section of the Needham community. She said discussion was based on how to collectively respond to identity-based harm, discrimination, physical harm and violence, and harassment. She said attendees also discussed what a potential Needham Response Network could look like, and that the next steps include compiling attendee feedback into one draft document to be shared and discussed.

Mr. Matthews thanked Ms. King for her work and in helping to organize the workshop.

Ms. Cooley said it was powerful to meet people she has not had an opportunity to work with before, and that the 51 people committed to action is very helpful.

Ms. Fitzpatrick commented on the floral arrangements outside Town Hall, thanking John Cosgrove for his generous donation.

Ms. Cooley reported the tent on the Town Common has been removed for the winter, but the tables will stay throughout the season. She encouraged people to get takeout from restaurants and enjoy their meal outside in the fresh air.

Ms. Fitzpatrick commented on the Town's Covid-19 response, noting Cindy Roy Gonzalez, Public Information Officer is working on a campaign of messaging the public to continue to wear masks, wash hands, gather in small groups, and to think about their actions which could expose people who could be harmed by the virus. Mr. Borrelli said the "stay home" aspect is a little much, as children are going to school and Town officials are trying to promote the public to support local retail shops and restaurants. Ms. Fitzpatrick said the message can be targeted.

Ms. Fitzpatrick reported the Governor issued a directive that the state is rolling back to Phase 3, Step 1 of the Commonwealth's reopening plan. She cited changes affecting business and restaurants.

7:07 p.m. Board Discussion:

1. 40 B Housing Guidelines & General Housing Policy

The Board discussed local and regional housing issues and policy, including a draft update to the Town's 40B guidelines circulated in September, comments, and related materials.

Mr. Matthews commented on SHI housing and market-affordable housing, and the draft update for the Town's Chapter 40B guidelines. Discussion ensued on housing policy and initiatives in Massachusetts and in Needham. Mr. Handel said the issue is regional and highly complicated. He said Needham is actively working as a community and several boards have major responsibilities related to housing.

Mr. Bulian thanked Mr. Matthews for the presentation. He commented on the Select Board's commitment to affordable housing over the years, evidenced by the growth of the 40B apartment complexes. He referred to developers, questioning how they "get those rents?" He said he is amazed how much money people pay on a monthly basis, for market units, noting all the units are filled. He said the vacancy rate is very small.

Mr. Handel noted lack of supply means you must pay a high rate to live within commuting distance to Boston. Mr. Handel invited Denise Garlick, State Representative to comment. Ms. Garlick thanked Mr. Matthews for the presentation. She said she shares the Select Board's concern on housing. She said she is deeply committed to the work of the Needham Housing Authority, recognizing the Charles River Center and the number of fully integrated group homes strengthening the Town of Needham.

Mr. Borrelli thanked Mr. Matthews for the robust presentation. He suggested the Town focus on home ownership and home buyer programs. He said zoning incentives should also be considered. He noted his experience indicates the hardest units to rent are the affordable units, because income qualifications are very restrictive. He spoke about SRA zoning and federal money for subsidized housing. He suggested making the process as least restrictive as possible for people that will qualify and that want to live in Needham.

Ms. Cooley said all of this discussion is happening because of the ministerial act of trying to update 40B guidelines. She said updating the guidelines triggered many comments from the community and that the issue is a complicated problem.

2. Committee Reports

Mr. Handel said as a participant in the Needham Unites Against Racism Initiative meeting held on Monday, he was moved by the quality of the discussion and the way people are beginning to be able to talk to each other about some very uncomfortable issues. He said Ms. Cooley's leadership is key.

Ms. Cooley said the committee is phenomenal and is working to trust each other, while allowing difficult comments to be made. She said the level of participation will bring the Town to a better product overall, and that the meeting last night revolved around a vision to guide the work of the committee. She said time must be taken to get the vision right, and that a draft document will soon be offered to the Select Board and community for comment. Ms. Cooley commented that discussion on policing did not occur as most of the meeting was spent on formulating the vision and key items to be included in that vision.

Mr. Borrelli concurred the group is excellent. He noted a positive email he received regarding Lisa Smith-McQueenie, facilitator of the NUARI discussion. Ms. Cooley agreed Ms. Smith-McQueenie is terrific.

7:58 p.m. Adjourn:

Motion by Mr. Borrelli that the Select Board vote to adjourn the Select Board meeting of Tuesday, December 8, 2020.

Second: Mr. Bulian. Unanimously approved 5-0 by roll call vote.

A list of all documents used at this Select Board meeting are available at:

<http://www.needhamma.gov/Archive.aspx?AMID=99&Type=&ADID=>