SELECT BOARD AGENDA Regular Meeting 6:00 p.m. February 27, 2024

Needham Town Hall Powers Hall & Zoom



Pursuant to Chapter 2 of the Acts of 2023, 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 or click the link below to join the webinar:

Link:

https://uso2web.zoom.us/j/83513916152?pwd=RnRubzhEelFVQkFSbGJKVm5La3VJd

Webinar ID: 835 1391 6152

Passcode: 389812

One-Tap Mobile: <u>+16469313860,,83513916152</u>

This is a public meeting of the Needham Select Board. The meeting is open to the public both in person and via Zoom. Residents are invited to provide comment during the public comment period (as set forth below) and for any item explicitly listed as a public hearing. Public comment is not available during other agenda items.

	6:00	Public Comment Period		
		Residents are encouraged to inform the Office of the Town Manager in		
	advance via email (OTM@needhamma.gov), telephone (781) 455-750 extension 204, or in person by the end of the business day prior to the meeting of their intent to participate in the public comment period. The Chair will first recognize those who have communicated in advantheir desire to speak for up to three minutes. If time allows, others wishing to speak will be recognized in an order determined by the Chair up to three minutes. The Board's policy on public participation in meetings can be found here.			
1.	6:00	Application for a Change of Manager for an All-Alcohol License – 365 Management Company, LLC d/b/a Residence Inn by Marriott		
		Boston Needham		
		Artem Dinov, Proposed Manager of Record		
2.	6:05	Community Preservation Committee (CPC) Consultation		
		Laura Dorfman, Co-Chair of CPC		
		Lauren Spinney, CPC Administrative Coordinator		
		Cecilia Simchak, Assistant Director of Finance		

3.	Great Plain Avenue Corridor Redesign - Concept Presentations	
		Carys Lustig, Director of Public Works
		Tyler Gabrielski, Director of Streets & Transportation
		Matthew Skelley, Fuss & O'Neill Project Team
		Eileen Gunn, Fuss & O'Neill Project Team
		 Margot Schoenfelder, Environmental Partners Project Team
		Conrad Leger, Environmental Partners Project Team
		Karen Fitzgerald, Environmental Partners Project Team
		 Alyssa Peck, Weston & Sampson Project Team
		 Johnathan Law, Weston & Sampson Project Team
		 Jeffrey Santacruce, Weston & Sampson Project Team
4.	8:00	Town Manager
-		Climate Action Committee Composition & Charge
		2024 Annual Town Meeting Update
		May 13, 2024 Special Town Meeting Update
		Town Manager Report
5.	8:15	Board Discussion
		Committee Reports
6.	8:25	Executive Session
	_	• Exception 3: To discuss strategy with respect to collective
		bargaining with the Needham Independent Town Workers
	Association (ITWA) and Needham Independent Public	
		Employees Association (NIPEA), where an open meeting may
		have a detrimental effect on the bargaining position of the public
		body and the chair so declares.

APPOINTMENT CALENDAR

1.	Sue Barber	Stormwater By-Law Working Group	
		Term Exp: 10/31/2024	
2.	William Hebard	Conservation Commission	
		Term Exp: 6/30/2025	
3.	Kamryn Doerr	Climate Action Plan Committee	
		Term Exp: 6/30/2024	
4.	Fred Moder	Climate Action Plan Committee	
		Term Exp: 6/30/2024	

CONSENT AGENDA *Supporting Documents Attached

- 1		
	1.	Approve a Mobile Food Vendor License renewal application for Cousins Maine
		Lobster to vend year round, once weekly on Tuesdays during permitted hours in
		permitted Mobile Food Vendor spaces on 1st Avenue between A and B Streets
		(pending completion of inspections by the Health and Fire departments).
	2.	Accept the following donations made to Needham's Aging Services Division:
		• \$50 from Pamela Shuman

	• \$50 from William Concannon
3.	Approve a request from Kevin Keane, N2A Coordinator, to hold the road event "Needham2Arlington." The event is scheduled for Saturday, April 20, 2024, at 8:30am – 3:30 pm. The event and route have been approved by the following departments: Fire, Police, and Public Works.
4.	Approve a request from Ashly Scheufele, Needham Baseball & Softball Special Events, to hold the road event "Needham Baseball & Softball Opening Day." The event is scheduled for Sunday, April 21, 2024, at 10:30am – 12:00 pm. The event and route have been approved by the following departments: Fire, Police, Park & Recreation, and Public Works.
5.*	Approve and sign Water Sewer Abatement #1324.

NOTICE OF APPROVED ONE-DAY SPECIAL ALCOHOL LICENSES

Hosting Organization	Event Title	Location	Event Date
Volante Farms	Grand Beer Fest	Volante Farms, 292 Forest Street	3/2/2024



Select Board TOWN OF NEEDHAM AGENDA FACT SHEET

MEETING DATE: 2/27/2024

Agenda Item	Application for a Change of Manager for an All-Alcohol License – 365 Management Company, LLC d/b/a Residence Inn by Marriott Boston Needham
Presenter(s)	Artem Dinov, Proposed Manager of Record

1. BRIEF DESCRIPTION OF TOPIC TO BE DISCUSSED

Residence Inn by Marriott Boston Needham, 80 B Street, has submitted an application for a Change of Manager. Our review indicates that Artem Dinov meets the statutory requirements to serve as a manager of a facility licensed to dispense alcohol. The requisite filing materials appear to be in order.

2. VOTE REQUIRED BY SELECT BOARD

Suggested Motion: Move that the Select Board, as Local Licensing Authority, approve and sign an application for a Change of Manager to Artem Dinov for Residence Inn by Marriott Boston Needham, 80 B Street, and to forward this application to the ABCC for approval.

3. BACK UP INFORMATION ATTACHED

- a. Amendment Application for a Change of Manager
- b. Applicant Statement
- c. Entity Vote
- d. Payment Receipt

All other documents related to these transactions are on file in the Office of the Town Manager.



The Commonwealth of Massachusetts Alcoholic Beverages Control Commission 95 Fourth Street, Suite 3, Chelsea, MA 02150-2358 www.mass.gov/abcc

AMENDMENT-Change of Manager

Change of License Manager

1. BUSINESS E	Entity Name	2			Municipality		ABCC License Number
365 Manag	365 Management Company, LLC Needham 07559-R1-0770						
The application	he application contact is the person who should be contacted with any questions regarding this application. Title Email Phone Darlene Louie Licensing Consultant						
3A. MANAGE	A. MANAGER INFORMATION						
The individua	al that has b	een appointed	to manag	e and cont	rol of the license	d business a	nd premises.
Proposed Man	nager Name	Artem Dinov			Date of B	irth	SSN
Residential Ad	dress						
Email					Pho	one	
		hours per week ensed premises	40	Last-Appr	oved License Man	ager Micha	ael Gendrin
Are you a U.S.	Citizen?*	OUND INFORM		p US Passp			anager must be U.S. citizen ificate or Naturalization Papers.
If yes, attach one of the following as proof of citizenship US Passport, Voter's Certificate, Birth Certificate or Naturalization Papers. Have you ever been convicted of a state, federal, or military crime? Yes No If yes, fill out the table below and attach an affidavit providing the details of any and all convictions. Attach additional pages, if necessary, utilizing the format below.							
Date		unicipality		Charg	e		Disposition
20 51401000							
3C. EMPLOYN Please provid			. Attach ac	ditional pa	ages, if necessary	, utilizing the	format below.
Start Date	End Date	Position			Employer		Supervisor Name
2020	Current	Asst. General	Manager	Resider	nce Inn Needhar	m,	Sharad Chand
2016	2020	Front Desk Ma	anager	AC Hot	el Cambridge		John Huang
Have you held	3D. PRIOR DISCIPLINARY ACTION Have you held a beneficial or financial interest in, or been the manager of, a license to sell alcoholic beverages that was subject to disciplinary action? OYes ONo If yes, please fill out the table. Attach additional pages, if necessary, utilizing the format below.						
Date of Action	Nam	e of License	State	City	Reason for susper	nsion, revocat	ion or cancellation
			+				
L hereby swear in	nder the nains	and penalties of ne	riury that th	e is formation	I have provided in t	his application is	s true and accurate:
	hereby swear under the pains and penalties of perjury that the information I have provided in this application is true and accurate: Manager's Signature Date 02/02/2024						

APPLICANT'S STATEMENT

i, Nav	in Dimond the: □sole proprietor; □ partner; □ corporate principal; ☒ LLC/LLP manager
	Authorized Signatory
of 365	Management Company
	Name of the Entity/Corporation
	submit this application (hereinafter the "Application"), to the local licensing authority (the "LLA") and the Alcoholic ges Control Commission (the "ABCC" and together with the LLA collectively the "Licensing Authorities") for approval.
Applica	reby declare under the pains and penalties of perjury that I have personal knowledge of the information submitted in the tion, and as such affirm that all statements and representations therein are true to the best of my knowledge and belief. It is submit the following to be true and accurate:
(1)	I understand that each representation in this Application is material to the Licensing Authorities' decision on the Application and that the Licensing Authorities will rely on each and every answer in the Application and accompanying documents in reaching its decision;
(2)	I state that the location and description of the proposed licensed premises are in compliance with state and local laws and regulations;
(3)	I understand that while the Application is pending, I must notify the Licensing Authorities of any change in the information submitted therein. I understand that failure to give such notice to the Licensing Authorities may result in disapproval of the Application;
(4)	I understand that upon approval of the Application, I must notify the Licensing Authorities of any change in the ownership as approved by the Licensing Authorities. I understand that failure to give such notice to the Licensing Authorities may result in sanctions including revocation of any license for which this Application is submitted;
(5)	I understand that the licensee will be bound by the statements and representations made in the Application, including, but not limited to the identity of persons with an ownership or financial interest in the license;
(6)	I understand that all statements and representations made become conditions of the license;
(7)	I understand that any physical alterations to or changes to the size of the area used for the sale, delivery, storage, or consumption of alcoholic beverages, must be reported to the Licensing Authorities and may require the prior approval of the Licensing Authorities;
(8)	I understand that the licensee's failure to operate the licensed premises in accordance with the statements and representations made in the Application may result in sanctions, including the revocation of any license for which the Application was submitted; and
(9)	I understand that any false statement or misrepresentation will constitute cause for disapproval of the Application or sanctions including revocation of any license for which this Application is submitted.
. ,	I confirm that the applicant corporation and each individual listed in the ownership section of the application is in good standing with the Massachusetts Department of Revenue and has complied with all laws of the Commonwealth relating to taxes, reporting of employees and contractors, and withholding and remitting of child support.
	Signature: Date: 01.26.24
	Title: Manager

ENTITY VOTE

The Board of Directors or I	LC Managers of 365	Management Company, LLC	
THE DOGLA OF DIRECTORS OF A		Entity Name	1
duly voted to apply to the	Licensing Authority of	Needham	and the
Commonwealth of Massac	husetts Alcoholic Beve	City/Town rages Control Commission on	01/25/2024
Commonwealth of Massac	ilusotts Algoriona sava	ages conti or commission on	Date of Meeting
ne following transactions (C	Check all that apply):		
Change of Manager			
Other			
_			
"VOTED: To authorize	Navin Dimond		
Norma		Name of Person	,
"VOTED: To appoint	Artem Dinov		
		f Liquor License Manager	,
			l control of the
premises described in t	the license and authorit itself could in any way	n or her with full authority and by and control of the conduct of have and exercise if it were a sett."	of all business
A true copy attest,		For Corporations ONL	1
NW O	Sin	A true copy attest,	
Corporate Officer /LLC Man	nager Signature	Corporation Clerk's Sig	nature
Navin Dimond			
(Print Name)		(Print Name)	



The Commonwealth of Massachusetts Alcoholic Beverages Control Commission 95 Fourth Street, Suite 3, Chelsea, MA 02150-2358 www.mass.gov/abcc

RETAIL ALCOHOLIC BEVERAGES LICENSE APPLICATION MONETARY TRANSMITTAL FORM

AMENDMENT-Change of Manager

APPLICATION SHOULD BE COMPLETED ON-LINE, PRINTED, SIGNED, AND SUBMITTED TO THE LOCAL LICENSING AUTHORITY.

ECRT CODE: RETA

Please make \$200.00 payment here: ABCC PAYMENT WEBSITE

PAYMENT MUST DENOTE THE NAME OF THE LICENSEE CORPORATION, LLC, PARTNERSHIP, OR INDIVIDUAL AND INCLUDE THE PAYMENT RECEIPT

ABCC LICENSE N	UMBER (IF AN EXISTING LICENS	SEE, CAN BE OBTAINED FROM THE CITY)		07539-HT-0770
ENTITY/ LICENSE	E NAME 365 Management (Company LLC		
ADDRESS 80	B Street			
CITY/TOWN N	eedham	STATE MA ZIP	CODE	02494
For the following tra	ansactions (Check all that a	apply):		
New License	Change of Location	Change of Class (i.e. Annual / Seasonal)	Cha	ange Corporate Structure (i.e. Corp / LLC)
Transfer of License	Alteration of Licensed Premises	Change of License Type (i.e. club / restaurant)	Ple	dge of Collateral (i.e. License/Stock)
Change of Manager	Change Corporate Name	Change of Category (i.e. All Alcohol/Wine, Malt)	Ma	nagement/Operating Agreement
Change of Officers/ Directors/LLC Managers	Change of Ownership Interest (LLC Members/ LLP Partners,	Ssuance/Transfer of Stock/New Stockholder	Cha	ange of Hours
— Directors/LEC Managers	Trustees)	Other	Cha	ange of DBA

THE LOCAL LICENSING AUTHORITY MUST SUBMIT THIS APPLICATION ONCE APPROVED VIA THE ePLACE PORTAL

Alcoholic Beverages Control Commission 95 Fourth Street, Suite 3 Chelsea, MA 02150-2358 1/25/24, 3:15 PM Print Receipt

Payment Confirmation

YOUR PAYMENT HAS PROCESSED AND THIS IS YOUR RECEIPT

Your account has been billed for the following transaction. You will receive a receipt via email.



Transaction Processed Successfully.

INVOICE #: a39e7424-2b6c-42d0-8371-145e9a47efb4

		\$200.00
FILING FEES-RETAIL	365 Management Company LLC	\$200.00
Description	Applicant, License or Registration Number.	Amount

Total Convenience Fee: \$4.70

Total Amount Paid: \$204.70

Date Paid: 1/25/2024 4:14:54 PM EDT

Payment On Behalf Of

License Number or Business Name: 365 Management Company LLC

Fee Type:

FILING FEES-RETAIL

Billing Information
First Name: Elise
Last Name: Turner
Address: 12700 Hillcrest Road, Suite 220
City: Dallas
State: TX
Zip Code: 75230
Email Address:



Select Board TOWN OF NEEDHAM AGENDA FACT SHEET

MEETING DATE: 2/27/2024

Agenda Item	Community Preservation Committee (CPC) Consultation
Presenter(s)	Laura Dorfman, Co-Chair of CPC Lauren Spinney, CPC Administrative Coordinator Cecilia Simchak, Assistant Director of Finance

1. BRIEF DESCRIPTION OF TOPIC TO BE DISCUSSED

CPC will have its annual consultation with the Select Board on the pending project applications for FY2025, as well as the appropriations of the CPA monies.

Appropriation to Community Preservation Fund

- Administrative Budget: \$82,000
- Community Preservation Fund Annual Reserve: \$1,187,214
- Community Housing Reserve: \$872,546
- Historic Resources Reserve: \$0
- Open Space Reserve: \$436,273

FY2025-01: Needham Housing Authority Linden Street Redevelopment:

- Amount from CPA: \$5,500,000
- CPA Category: Community Housing
- Brief Summary: The redevelopment and construction of public housing units located at Linden Street

FY2025-02: Needham High School Tennis Court Improvements:

- Amount from CPA: \$1,440,000
- CPA Category: Recreation
- Brief Summary: The construction of eight new tennis courts at Needham High School

FY2025-03: DeFazio Fencing Improvements

- Amount from CPA: \$417,000 for
- CPA Category: Recreation
- Brief Summary: The replacement of fencing around the DeFazio Complex.



Select Board TOWN OF NEEDHAM AGENDA FACT SHEET

The CPC Public Hearing is scheduled for March 13, 2024 at 7:00pm, at the Charles River Room, 500 Dedham Avenue, Needham (PSAB) and via Zoom. It will also be televised on the Needham Channel.

2. VOTE REQUIRED BY SELECT BOARD

N/A – Discussion Only

3. BACK UP INFORMATION ATTACHED

- a. Memorandum from CPC to Select Board
- b. Memorandum from David Davison, Deputy Town Manager/Director of Finance to Community Preservation Community re: FY2025 CPA Revenue Estimate, Available Funds, and Appropriations

MEMORANDUM

To: Select Board

Community Preservation Committee Members

From: Joe Barnes & Laura Dorfman, Community Preservation Committee Co-Chairs

Cecilia Simchak, Assistant Director of Finance Lauren Spinney, CPC Administrative Coordinator

Re: FY2025 Community Preservation Committee Grant Applications and Finance Article

Date: February 22, 2024

In connection with the Community Preservation Committee's ("CPC" or "Committee") consultation with the Select Board scheduled for February 27, 2024, below is a summary of the three FY2025 grant applications and the CPC financial article under review by the CPC, including a preliminary "sense of the Committee" with respect to each.

It should be noted that information provided in this memorandum is not intended to be in lieu of Committee member discussions and applicant presentations which occurred during CPC meetings and subsequently memorialized in CPC minutes. Furthermore, the preliminary sense of the Committee is not a vote and is not intended to abrogate the CPC's full review process regarding the FY2025 grant applications and the CPC Finance Article. That review process is ongoing, and the Committee will not formally vote on the applications and Finance Article until it concludes the review process, which includes a public hearing (scheduled for March 13, 2024), and consultations with the Finance Committee and Select Board.

ARTICLE X: APPROPRIATE TO COMMUNITY PRESERVATION FUND

This Article seeks Town Meeting approval to appropriate the estimated FY2025 Community Preservation Fund Revenues and allocate them pursuant to the requirements of the Community Preservation Act.

According to our Finance Director, the preliminary estimated CPA revenue for FY2025 is as follows:

Surcharge Receipts Estimate	\$3,387,500
State Trust Fund Distribution Estimate	\$ 578,615
FY2025 Estimated Revenue	\$3,966,115

The Community Preservation Act mandates that at least 10% of annual property tax surcharges and state distribution funds be spent on actual projects, or be allocated for future projects, in three CPA special reserves: Community Housing, Open Space, and Historic Resources. To ensure the Town remains compliant with this statutory requirement, the CPC's practice has been to appropriate 11% of the estimated revenue for each special reserve. Using this formula, the required

special reserve (at 11%) would be \$436,273 each for Community Housing, Historic Resources, and Open Space. However, the required annual appropriation for Historic Resources is part of the debt service payment for the Town Hall and Emery Grover Historic Restoration projects, which Town Meeting approves as part of the budget article. Given that the Town will meet its special reserve obligation for Historic Resources via the debt service payments described above, the appropriations would be stated in the draft Town Meeting Warrant, as follows:

A.	Administrative and Operating Expenses	
	of the Community Preservation Committee:	\$ 82,000

Reserves:

Α.

B.	Community Preservation Fund Annual Reserve:	\$ 1	,623,488
C.	Community Housing Reserve	\$	436,273
D.	Historic Resources Reserve	\$	0
E.	Open Space Reserve	\$	436,273

Since FY2022, the CPC has elected to appropriate 22% of the estimated revenue for the Community Housing special reserve to ensure that at least 20% of the CPA revenues were appropriated to the Community Housing Reserve or each fiscal year. The CPC took this action for a number of reasons, including anticipated requests for funding from the Needham Housing Authority (NHA) in connection with its planned efforts to redevelop affordable housing units at Linden-Chambers, Seabeds Way and Cook Drive, and High Rock Estates. The Committee anticipates receiving requests for funding in the upcoming years from NHA as well as other government and non-government organizations in connection with the development of affordable housing.

The sense of the Committee is to support a recommendation to Town Meeting to appropriate 22% of the FY2025 estimated CPA revenue for the Community Housing Reserve to once again ensure that at least 20% of the actual CPA revenue for FY2025 is appropriated to the Community Housing Reserve.

Assuming that is the case, the appropriations would instead be stated in the draft Town Meeting Warrant, as follows:

82,000

1 2.	of the Community Preservation Committee	Ψ	0=,000
Reserv	ves:		
B.	Community Preservation Fund Annual Reserve	\$ 1	1,187,215
C.	Community Housing Reserve	\$	872,545
D.	Historic Resources Reserve	\$	0
E.	Open Space Reserve	\$	436,273

Administrative and Operating Expenses

Please note that the current balances in the respective CPA reserves are as follows:

Community Housing Reserve	\$ 3,649,749
Historic Resources Reserve	\$ 106,669
Open Space Reserve	\$ 2,401,894
FY2024 General Reserve	\$ 1,749,706
CPA Free Cash	\$ 4,466,031

ARTICLE X: APPROPRIATE FOR NEEDHAM HOUSING AUTHORITY LINDEN STREET REDEVELOPMENT PROJECT

CPC Grant Application FY2025-01 is an application submitted by the Needham Housing Authority (NHA) requesting \$5,500,000 for redevelopment and construction of public housing units located at Linden Street under the CPA category of Community Housing.

The NHA currently provides 152 affordable public housing units for elderly or disabled households at their Linden Street and Chambers Street sites. The properties are approximately 60 years old and at the end of their useful lives. They suffer from a number of deficiencies, including the lack of accessibility features needed for an elderly/disabled population like elevators, undersized units, insufficient storage space, and original finishes/systems that need replacement.

In its FY2025 Initial Eligibility Project Application, the NHA stated that the redevelopment of the Linden Street and Chambers Street sites will proceed in three phases: Phases 1A/1B (Linden Street) and Phase 2 (Chambers Street). At this time, the NHA is seeking CPA funding of \$5,500,000 for construction costs associated with Phases 1A/1B only, which includes the redevelopment of 72 existing Linden Street units plus the creation of 64 new Linden Street units (for a total of 136). The Chambers Street site, which consists of 80 units, is not being redeveloped at this time, but is planned as Phase 2 of this project to occur in the future.

The NHA estimates the total cost for Phases 1A/1B to be approximately \$83,864,739. In response to due diligence questions posed by the CPC (<u>found here</u>), the NHA outlined fourteen sources of funding upon which it will rely for this project, including the \$5.5M requested CPA funds. More detailed information about the NHA's funding sources may be viewed at Tab J of its supporting documentation: "Supplemental Breakdown of Permanent Sources Linden Phases 1A/1B" found here: https://cambridgehousing.app.box.com/s/4n6r7t7rgvyyssyrj3gmrc2wj7cvqv0k.

The NHA states, "Over 90% of the proposed budget is being raised from non-CPA funding sources." and contends that demonstrated support by the Town (vis a vis the requested \$5.5M CPA funds) is critical to incentivizing those state, private sector and other sources of funding to invest in the project.

In FY2023 the NHA received a CPA grant in the amount of \$1,386,000 for predevelopment costs in connection with this project. That grant, along with a \$1,250,000 ARPA Chapter 102 earmark and \$1,500,000 in Partnership for Growth funding, provided the predevelopment funds the NHA required to advance this project to the construction phase. The NHA is currently in the process of submitting reimbursement requests in connection with the FY2023 grant. Those requests for

reimbursement are being vetted and processed by the Town Financed Community Housing Oversight Committee (T-CHOC).

Following a RFP process, the CPC retained an affordable housing and finance consultant to review the NHA's FY2025 application and to provide guidance to the CPC throughout its review process. The consultant's fee will be paid from the CPC's administrative budget. The consultant met with the NHA and their development consultant, Cambridge Housing Authority (CHA). She reviewed the application, supporting documentation, and due diligence responses. She attended a presentation that the NHA and CHA made to the CPC, and provided the CPC with analysis regarding the project's funding sources, budget, and timeline.

The CPC conducted a detailed due diligence review and received information from the NHA concerning, among other things, the project timeline, projected budget, updated sources and uses of funds, required zoning relief, and information regarding the NHA's development partner and consultants. The Committee will hold a Public Hearing regarding FY2025 Applications on March 13, 2024.

The sense of the Committee is in support of funding CPC Grant Application FY2025-01, first from the Community Housing Reserve (\$3,649,749) and the balance from CPA Free Cash (\$1,850,251).

<u>APPROPRIATE FOR NEEDHAM HIGH SCHOOL</u> <u>TENNIS COURT IMPROVEMENTS</u>

CPC Grant Application FY2025-02 is an application by the Needham Park and Recreation Department (Park & Rec) for CPA funds in the amount of \$1,440,000 for the construction of eight new tennis courts at Needham High School under the CPA category of Recreation.

As stated in Park & Rec's Initial Project Eligibility Application, the existing NHS tennis courts are in significant disrepair and unsafe for play. As a result, the NHS tennis teams have been practicing and playing matches at the Mills and Newman Courts, putting additional wear and tear on those courts and decreasing residents' access. This project will allow the NHS teams to move back to the high school and allow full access of the other courts to the public.

Park & Rec proposes replacing the existing four asphalt courts with eight new post-tension concrete courts. "Post-tension concrete carries a 25 year warranty and is quickly becoming the industry norm. In addition, post tension concrete will significantly decrease the maintenance and staff hours for the upkeep of these courts." The project also includes drainage and landscape improvements, new perimeter fencing, handicap accessible walkways, and installation of a shade structure. The total estimated cost for this project is \$2,568,366.58. It is on the Town's Capital Plan at a total project cost of \$2,600,000, contingent upon CPC funding of \$1,440,000.

In FY2022 Park & Rec received a CPA grant in the amount of \$50,000 for design costs associated with this project.

The CPC conducted a detailed due diligence review and received information from Park & Rec concerning, among other things, its proposed budget, timeline, and cost comparisons with respect to construction materials and number of courts. The CPC also conducted a site visit and received a presentation by Park & Rec and the landscape architecture/engineering firm for this project. The Committee will hold a Public Hearing regarding FY2025 Grant Applications on March 13, 2024.

The sense of the Committee is in support of funding CPC Grant Application FY2025-02 from CPA Free Cash.

ARTICLE X: APPROPRIATE FOR DEFAZIO FENCING IMPROVEMENTS

CPC Grant Application FY2025-03 is an application made jointly by the Needham Department of Public Works and the Needham Park and Recreation Department for CPA funds in the amount of \$417,000 for replacement of fencing around the DeFazio Complex under the CPA category of Recreation.

As stated in the Initial Eligibility Application, the DeFazio complex is highly utilized by the community, supporting multiple sports across high school athletics and Park and Recreation Department programming. The existing fencing is 15 years old and showing signs of age. The concrete post foundation is in good condition and will be preserved, but the fabric of the fencing, including hardware, gates, security gates, etc. has reached the end of its useful life and should be replaced. The fencing is bent and curled, the coating is peeling, and the hardware is buckling, creating both safety and aesthetic concerns. The proposed improvements will also provide more secure entrance and egress points to the fields to prevent unauthorized use and damage.

The initial cost estimates provided by the Town's on-call vendor totaled between \$396,720 – 420,000. If CPA funding is approved, the Town will put the project out for competitive bidding.

The CPC conducted a detailed due diligence review and received information from The Needham Department of Public Works concerning, among other things, its proposed budget and timeline, a breakdown of site jurisdiction, and a letter of support from a non-applicant stakeholder. The CPC also conducted a site visit and received a presentation by Edward Olsen, Superintendent of Park and Forestry. The Committee will hold a Public Hearing regarding FY2025 Grant Applications on March 13, 2024.

The sense of the Committee is in support of funding CPC Grant Application FY2025-03 from CPA Free Cash.

Town of Needham Finance Department

To: Community Preservation Committee

From: David Davison, Deputy Town Manager/Director of Finance

CC: Select Board; Kate Fitzpatrick, Town Manager; Katie King, Deputy Town Manager; Cecilia

Simchak, Assistant Director of Finance

Date: Tuesday, February 20, 2024

Re: FY2025 CPA Revenue Estimate, Available Funds, and Appropriations

Here is an update of the estimated Community Preservation Act (CPA) revenues and reserves for FY2025.

Surcharge Receipts Estimate	\$3,387,500
State Trust Fund Distribution Estimate	\$ 578,615
FY2025 Estimated Revenue	\$3,966,115

The current balance in the respective CPA reserves are as follows:

Community Housing Reserve \$3,649,749 Historic Resources Reserve \$106,669 Open Space Reserve \$2,401,894

FY2024 General Reserve \$1,749,706* (see note)

CPA Free Cash \$4,466,031

Although the FY2024 General Reserve was appropriated at \$1,749,706, I recommend that the Committee assume only \$1,309,316 is available for appropriation. The reason for this recommendation is because the FY2024 revenue estimate from the state was set at \$1,096,787. The Town received a distribution of \$656,397 from the Commonwealth, a short fall of \$440,390. Estimated receipts are the funding source for this reserve. Given the multiple reports that state revenues are down, it is unlikely that a supplemental distribution will be made this year. Assuming the lower figure (\$1,309,316) would reduce the likelihood of a deficit at the close of the fiscal year if the General Reserve was used to fund appropriations.

Suggested funding sources for the warrant articles on the Annual Town Meeting warrant.

High School Tennis Courts

The funding request is for \$2,300,000. However, only \$1,440,000 is requested from the CPA. This request may be considered for recreational purposes. Funding for this category of expense may be supported by CPA receipts, the FY2024 General Reserve, and/or CPA Free Cash. If the Committee were supportive of the funding request, the recommendation is that it be funded from CPA Free Cash.

Linden Street Redevelopment Project

The funding request is for \$5,500,000. This request may be considered for community housing purposes. Funding for this category of expense may be supported by CPA receipts, the Community Housing Reserve, the FY2024 General Reserve, and/or CPA Free Cash. If the Committee were supportive of the funding request, the recommendation is that it be funded first from the Community Housing Reserve (\$3,649,749) and the balance (\$1,850,251) from CPA Free Cash.

DeFazio Complex Fencing Project

The funding request is \$417,000. This request may be considered for recreational purposes. Funding for this category of expense may be supported by CPA receipts, the FY2024 General Reserve, and/or CPA Free Cash. If the Committee were supportive of the funding request, the recommendation is that it be funded from CPA Free Cash.

Recap of the Project Request Funding Source Recommendations

Description	Request	Community Housing Reserve	Historic Resources Reserve	Open Space Reserve	FY2024 General Reserve	Free Cash
Available>		\$3,649,749	\$106,669	\$2,401,894	\$1,749,706	\$4,466,031
High School Tennis Courts	\$1,440,000					-\$1,440,000
Linden Street Redevelopment Project	\$5,500,000	-\$3,649,749				-\$1,850,251
DeFazio Complex Fencing Project	\$417,000					-\$417,000
Balance after Appropriation		\$0	\$106,669	\$2,401,894	\$1,749,706	\$758,780

Annual Budget and Reserves

In accordance with the Community Preservation Act, a minimum of 10% of the estimated CPA receipts (surcharges and state match) each year must be appropriated for Community Housing, Historic Resources, and Open Space purposes or reserved for future appropriation. The Town traditionally sets aside 11% of the estimated receipts to account for any changes to the estimate that may occur after the publication of the Town Meeting Warrant in the spring and before the tax rate is approved by the Department of Revenue in December. The last three fiscal years (FY2022, FY2023, and FY2024) the Committee voted to reserve approximately 22% of the annual estimate for future community housing purposes. The required reservations would be funded from FY2025 estimated CPA receipts.

Community Housing Reserve	\$872,	546
Historic Resources Reserve	\$	0 *
Open Space Reserve	\$436,2	273

^{*}The debt service payable during FY2025 for projects (Town Hall and Emery Grover) which qualified as historic resources projects is greater than the 11% calculation and therefore no appropriation to the Historic Resources Reserve is necessary.

The amount of FY2025 CPA receipts that will be appropriate to satisfy CPA debt for the year is \$1,388,082. The annual CPC operating budget is assumed at \$82,000, the same as the current year. This would leave \$1,187,214 in estimate receipts that could be designated for the FY2025 General Reserve.

Recap on the Use of Estimate Receipts

Description	Receipts	Debt Service	CPC Admin Budget	Community Housing Reserve	Historic Resources Reserve	Open Space Reserve	FY2025 General Reserve
Estimated Receipts	\$3,966,115						
FY2025 Debt Service	-\$1,388,082	\$1,388,082					
FY2025 CPC Admin Budget	-\$82,000		\$82,000				
Community Housing 22% of Receipts	-\$872,546			\$872,546			
Open Space 11% of Receipts	-\$436,273					\$436,273	
General Reserve	-\$1,187,214						\$1,187,214
Available After Appropriation	\$0	\$1,388,082	\$82,000	\$872,546	\$0	\$436,273	\$1,187,214
Carry Forward from FY2024				\$0	\$106,669	\$2,401,894	\$0
Available July 1, 2024		\$1,388,082	\$82,000	\$872,546	\$106,669	\$2,838,167	\$1,187,214

Please do not hesitate to contact me if you have any questions.



Select Board TOWN OF NEEDHAM AGENDA FACT SHEET

MEETING DATE: 2/27/2024

Agenda Item	Great Plain Avenue Corridor Redesign - Concept Presentations
Presenter(s)	Carys Lustig, Director of Public Works Tyler Gabrielski, Director of Streets & Transportation Fuss & O'Neill Project Team

1. BRIEF DESCRIPTION OF TOPIC TO BE DISCUSSED

Representatives from three prequalified engineering firms will present their concept plans for the Great Plain Avenue Corridor Redesign project, as solicited by the Department of Public Works.

2. VOTE REQUIRED BY SELECT BOARD

N/A – Discussion only. The Select Board will provide feedback to the Selection Committee.

3. BACK UP INFORMATION ATTACHED

- a. Downtown Redesign Great Plain Avenue Corridor Solicitation for Detailed Proposals
- b. Fuss & O'Neill Proposal Submission
- c. Environmental Partners Proposal Submission
- d. Weston & Sampson Proposal Submission

Downtown Redesign – Great Plain Avenue Corridor - Solicitation for Detailed Proposals 24DPW189M

Timeline

Release: December 11, 2023

Statement of Interest: December 19, 2023

Proposals Due: January 26, 2024 @ 4pm

Eligibility

Only consulting firms prequalified under 23DPW119M Professional Engineering Services for Roadway Design, Rehabilitation, and Repair Projects & Programs are eligible to submit under this process. All firms prequalified under 23DPW119M will be able to participate, up to five firms.

General

The Town of Needham is requesting detailed proposals from its five engineering firms prequalified under Professional Engineering Services for Roadway Design, Rehabilitation, and Repair Projects & Programs (23DPW119M) to reimagine Needham's downtown along Great Plain Avenue between Linden Street and Warren Street. Portions of this section of Great Plain Avenue are along the Commonwealth's numbered route system, Route 135.

The Town will provide each firm who is willing to participate a budget of up to \$5,000 to submit a more detailed proposal than a typical Request for Proposal process would require. The detailed proposals will allow firms to provide greater detail on their project approach and for the Town to evaluate the clarity of vision, ability to translate the Town's needs into feasible design, and ability to communicate those visions to the community.

Background

The Town began its journey to redesign the main downtown of Needham along the intersections of Great Plain Avenue/Chapel Street/Chestnut Street and Great Plain Avenue/Dedham Avenue/Highland Avenue in 2009. The initial intent of this project was to design the entire downtown corridor and then construct it in phases with accrued Chapter 90 funds. This plan had a construction timeline of approximately 30 years.

The first phase of this project, including the two signalized intersections and the areas between was constructed and completed in 2017. This project's main purpose was to address some major dysfunction in coordinating these two signalized intersections along with the at-grade crossing on Great Plain Avenue, and to improve the aesthetics and functionality of the downtown for pedestrians with no reduction in on-street parking.

Project Reset

In 2021 the Town had accrued sufficient funds in Chapter 90 to pursue its second phase of design, which at that time consisted of extending the improvements down Great Plain Avenue west towards Maple Street and east towards Pickering Street. This design was updated and presented to the Select Board at two separate meetings. It became clear after input from the public and officials that the design originally

Downtown Redesign – Great Plain Avenue Corridor - Solicitation for Detailed Proposals 24DPW189M

envisioned in 2009 no longer met the long-term project goals of the community and that a reset would be necessary.

Both time and the COVID-19 pandemic prompted this reset. During the period between the original design work and the intended construction of this first section, the Select Board and many other offices in Town transitioned. These new officials came with new ideas about how people should experience and travel through Needham's downtown. Additionally, the way people use outdoor spaces for commerce and entertainment purposes has changed.

Added to this project was a proposed desire expressed by the community and the Select Board to explore and pursue a "quiet zone" designation from the MBTA. Needham has six at-grade crossings in the commercial core, the largest of which is at Great Plain Avenue. The installation of a quiet zone was added later in the project. The advantage of including a quiet zone into this project is that it would allow the Town to design within the MBTA right of way, and potentially add amenities in that area of the downtown.

Due to the ever-evolving nature of how individuals use and travel through the downtown spaces, it was determined that the downtown would not be redesigned as a whole. Funds did not exist to reconstruct the entire downtown at once, and there was no desire to disrupt the entire downtown at the same time. It was determined that focusing on the Great Plain Avenue Corridor would provide the most benefit, as it has many deficiencies and provides the backbone of the downtown area.

Through the Bottleneck Reduction Grant, the Town is working with Nitsch Engineering to upgrade the signals at:

- Great Plain Avenue, Chestnut Street, and Chapel Street
- Great Plain Avenue at the Railroad Crossing
- Great Plain Avenue, Dedham Avenue, and Highland Avenue
- Chapel Street, Highland Avenue, and May Street

The Town has done some reset work to discuss more broadly the objectives for this project, so that future design work can reflect current community values.

Creativity and vision are encouraged as part of this process as the Town seeks to reimagine the Downtown.

Award

After the submitted proposals are reviewed and presentations are made to Town officials, a firm will be selected based on the proposal that is determined to be the most responsive and advantageous to the Town. The selected consultant will work the with Town to negotiate the scope and fee with the Town. The selected firm must be willing to sign the Town's project agreement as part of their master contract.

Timeline

- December 2023: Release solicitation
- January 26, 2024: Submit detailed proposal; presentations will be scheduled in February

Downtown Redesign – Great Plain Avenue Corridor - Solicitation for Detailed Proposals 24DPW189M

- March 2024: Negotiate and award design contract
- March 2024 September 2024: Work with the Department of Public Works and all stakeholders engaged in the preliminary design work and public engagement process, including design features and concerns, funding opportunities and plans
- September 2024 present: Submit 25% design to Select Board, provide cost estimates for May Town Meeting funding process
- February 2025 present: Submit 80% design to Select Board with updated cost estimates
- April 2025: Submit final design and bid specifications
- May 2025: Anticipated construction bid release and funding from Town Meeting secured
- August 2025: Construction begins with a 24-month anticipated construction schedule

Documents Provided by the Town about Needham and the Great Plain Avenue Corridor to all Participating Consultants (this information will be provided digitally to those answering in the affirmative to the statement of interest)

- Survey data of Great Plain Ave
- Parking Study https://www.needhamma.gov/5383/Needham-Center-and-Needham-Heights-Parki
- Design information from the preliminary design work from both 2015 and 2021 on this corridor
- Survey information collected from the Town's current Select Board members and Public Works staff on right of way allocation and vision
- YouTube videos referencing the downtown vision:
 - https://www.youtube.com/watch?v=YE8vk91G_AM&list=PL3PRZZjHC3yE9AnWTYT5KKd VWYjmXJVug&index=100_(11/10/20)
 - https://www.youtube.com/watch?v=6GdBcQJAzCo&list=PL3PRZZjHC3yE9AnWTYT5KKd VWYjmXJVug&index=42 (5/31/22)
 - https://www.youtube.com/watch?v=kCkkalieTJE&list=PL3PRZZjHC3yE9AnWTYT5KKdV/ WYjmXJVug&index=9 (7/25/23)
- Traffic data on the area

Submission Requirements

- A detailed approach plan on how the firm will design this project
- A breakdown of staff assigned to the project, their roles, and backgrounds, including resumes and detailed descriptions of work on relevant projects
- An outreach and communications plan on how the firm will get feedback and assist the Town in making decisions
- A conceptual drawing of a roadway cross-section of the preliminary concepts in one section of Great Plain Ave, taking into consideration the provided feedback from the Select Board and Town staff
- Up to three 20 minute presentations on the proposed design process to Town officials and/or the public
- Examples of corridor reimagination projects of a similar scope

Downtown Redesign – Great Plain Avenue Corridor - Solicitation for Detailed Proposals 24DPW189M

Communication

Deadline for Questions: Intended firms should communicate all questions to DPWAdmin@needhamma.gov. The deadline for questions will be January 5, 2024. All questions will be answered collectively to all firms submitting.

Fee

The Town is prepared to pay up to \$5,000 to each firm who submits proposals in response to this solicitation. This proposal requires more work than a typical Request for Proposal submission and the Town is willing to pay these additional funds to get a better understanding of how each firm would approach this project. Fees will be paid after the presentation to the Select Board.

Downtown Redesign – Great Plain Avenue Corridor - Solicitation for Detailed Proposals 24DPW189M

Statement of Submission

Please complete and email to dpwadmin@needhamma.gov before December 19, 2023.
Firm Name:
Lead Person Submitting:
Date Submitted:
□ Our firm will be participating in the downtown redesign solicitation process.
\$ proposed fee to provide proposal
□ Our firm will not be participating in the downtown redesign solicitation process.
Print Name and Title:
Authorized Signature and Title:

Downtown Redesign – Great Plain Avenue Corridor - Solicitation for Detailed Proposals 24DPW189M

Certificate of Authority

Complete Only If Applicable

1.	I hereby o	certify that I am the Clerk/Secretary of						
		(insert full name of Corporation)						
2.	corporatio	on, and that (insert the name of officer						
		(insert the name of officer	who signed the contract and bonds.)					
3.	is the duly	elected(insert the title of the o						
		(insert the title of the o	officer in line 2)					
4.	of said corporation, and that on (insert a date that is ON OR BEFORE the date the officer signed the contract and bonds.)							
	directors w	uthorized meeting of the Board of Directors ere present or waived notice, it was voted t	hat					
5.		the _						
	(insert	the the	(insert title from line 3)					
	name execut with o and th	and on behalf of said corporation, and a tion of any contract of obligation in thi r without the Corporate Seal, shall be v	ed to execute contracts and bonds in the affix its Corporate Seal thereto, and such a corporation's name and on its behalf, walid and binding upon this corporation; and or rescinded and remains in full force					
6.	ATTEST: _		AFFIX CORPORATE					
		(Signature of Clerk or Secretary)*	SEAL HERE					
7.	Name:							
		(Please print or type name in line 6)*						
8.	Date:							
		(insert a date that is ON OR AFTER the officer signed the contract and bond)						

The name and signature inserted in lines 6 & 7 must be that of the Clerk or Secretary of the corporation.

Proposal For

Downtown Redesign -Great Plain Avenue Corridor

24DPW189M

Submitted to

Town of Needham, Massachusetts

February 9, 2024











Tyler Gabrielski Management Analyst Assistant Town Administrator Town of Needham 500 Dedham Avenue Needham, MA 02492

RE: Solicitation for Detailed Proposal - Downtown Redesign - Great Plain Avenue Corridor

24DPW189M

Dear Mr. Gabrielski:

Having a vibrant downtown is crucial for community identity, connectivity, and economic prosperity. We commend the Town of Needham for its proactive efforts in planning and executing the first phase of the downtown transformation, which includes notable achievements such as new signalized intersections, pedestrian-friendly enhancements, and the stunning refurbishment of Town Hall Park. It is evident that the Town has a clear vision and is actively engaging with stakeholders to create a downtown that is not only functional but also reflects the aspirations of the community.

Our team at Fuss & O'Neill believes in seamlessly integrating into existing projects, building on prior successes, and contributing to the ongoing momentum of transformative initiatives. We recognize the challenges presented by limited right-of-way on Great Plain Avenue and understand the need for careful consideration in allocating space for various elements that contribute to the community's vision. Our approach is rooted in community engagement, consensus building, and informed decision-making to help navigate competing interests and arrive at a successful design solution. We believe strongly in the inclusion of community engagement in every step of the process.

We bring decades of extensive experience in collaborating on transformative projects throughout New England, aligning closely with the scope of the Great Plain Avenue project. Building on our proven track record, we have successfully undertaken initiatives in various municipalities across Massachusetts, including Bridgewater, Lexington, Northampton, and Pittsfield among others, mirroring the multifaceted nature and complexities inherent in the revitalization of urban spaces. This collective experience uniquely positions us to understand and address the intricacies of downtown transformation, traffic optimization, and community engagement, all of which are pivotal aspects of the Great Plain Avenue project. We are eager to leverage this wealth of expertise and collaborative spirit to contribute effectively to the success of Needham's vision for a vibrant and accessible downtown.

108 Myrtle Street Suite 502 Quincy, MA 02171 † 617.282.4675 800.286.2469 f 860.533.5143

www.fando.com

Connecticut
Maine
Massachusetts
New Hampshire
New York
Rhode Island

Vermont

We are excited about the prospect of contributing our expertise to the next phases of the Great Plain Avenue project and working collaboratively to achieve Needham's vision for a thriving, accessible, and welcoming downtown. If you have any further questions or require additional information, please feel free to contact Matthew Skelly, PE, PTOE. We appreciate your consideration and look forward to the opportunity to serve the Town of Needham.

Sincerely,

Matthew Skelly, PE, PTOE Senior Project Manager Kevin Johnson, PE Executive Vice President

SECTION 1

Approach and Outreach and Communications Plan

Wall Street Corridor Improvements - Norwalk, CT













Project Understanding

Having a great downtown provides an anchor to the community and is vital to the livability and identity of Needham. The Town of Needham seeks to transform its downtown into a place that fosters community, connectivity, and economic prosperity. You want it to feel like a village, be a welcoming environment, and a sought-after destination. Most importantly, you want it to be accessible to all by providing as many safe modes of transportation and access as possible.

We recognize that the Town has done exceptional work in planning for its downtown and for the ongoing transformation of the Great Plain Avenue area. You have already completed the successful first phase of work including the design and construction of two new signalized intersections in 2017 and improvements to the aesthetics and functionality of the downtown for pedestrians with minimal impacts to on-street parking. The refurbishment of Town Hall Park in front of the grand Town Hall is a stunning public space at the heart of your community. In addition, you have had numerous meetings to gather input, acknowledged the evolving complete streets design focus and the impact of COVID on the business and community uses of your downtown. We recognize that our team is joining you in an already moving process; and we want to seamlessly add to the project's ongoing momentum and creativity for its next phases – not to start over and completely rethink prior work.

However, we also recognize that Great Plain Avenue has limited right-of-way width, or space to allocate for all of the elements or experiences that your community desires. Different stakeholders will have valid yet competing interests for the use of the limited public realm along the streetscape. Priorities will need to be set and important decisions will need to be made on the tradeoffs. Our approach is designed to help your community come to consensus on its priorities and make those difficult decisions by focusing on full analysis to understanding of the tradeoffs, community consensus building and transparent decision making.



Our Approach

At Fuss & O'Neill community engagement and consensus building are at core of our design approach. We believe in robust and well-facilitated engagement that provides complete and transparent information to stakeholders. In our experience, this type of communication leads to efficient decision making. By building communication, education, engagement and transparency into our process, Needham can arrive at a successful design that the community is motivated to see go to construction.

CORE ELEMENTS OF APPROACH

Community Engagement

We believe that the best design solutions come from seeking input from a wide array of stakeholders projects go best when we work closely with Town leadership and the community throughout the entire arc of the process.

Consensus Building

Our engagement approach is centered around building consensus on balancing competing priorities, and support for a final design solution. Identifying, defining and prioritize project objectives at the start.

Informed Decision Making

We seek to provide the analysis needed to fully inform your decision on the final design.

Value Added

We are an interdisciplinary firm with in-house expertise in additional disciplines that are important to a community-driven transformational design project. This includes expertise in downtown revitalization, economic development, climate resilience, green infrastructure and stormwater management.

Communication Communication Communication

We are proud of our company's emphasis on the importance client communication and work hard to create communications plans that work for you.











How a community chooses to allocate its right-of-way between competing uses (vehicles, bicycles, pedestrians, sidewalk dining, street trees, etc.) helps determine the vibrancy and livability of your downtown. However, we acknowledge that there are other factors Needham can consider as it seeks to make the work on Great Plain Avenue truly transformational. We work within a framework that is well-defined by the Project for Public Spaces concept of "What makes a Great Place?"

To put these core elements into action, our approach begins with gathering input from the Town and key stakeholders. The Fuss & O'Neill team will seek to understand where the community is currently in the revitalization process to launch a path forward into the future. That information will be molded into three conceptual level alternative sketches that can start to bring a vision for Great Plain Avenue to life. From there, we will refine these concepts with the help of the Project Advisory Committee and our traffic engineering team to understand the best use of right-of-way while also keeping people moving efficiently through



the corridor. Finally, we utilize any additional analysis and input to refine three alternatives for presentation in a community-wide design charette process. We believe going into a public design charette with as many questions answered on the impacts of various designs will be the most productive process and help the community understand the project and ultimately expedite your design and construction schedule.

After gathering a plethora of feedback from the process outlined above and working with the Project Advisory

Committee on any design refinements or outstanding design elements, then we move



Credit: Project for Public Spaces What Makes a Successful Place? (pps.org)

forward to your selection process on a preliminary design and possibly a pilot phase of the preferred alternative.

Critical Path of Project Tasks

Project Scoping: Our team will begin the process by scheduling a scoping meeting with the Town of Needham to define the project evaluation criteria, refine the project scope elements and determine the critical path/project schedule, as needed. In the scoping process we will work together with you to identify additional data needs, review our engagement plan, and build a customized outreach and communications plan with you.

Establish Project Advisory Committee: We understand that Needham has formed a new Mobility Committee and will enhance or develop a Project Advisory Committee to help guide the decision on a final design for Great Plain Avenue. We recommend a diverse committee of residents, business owners, and stakeholders to provide ongoing input and guidance to the design team throughout the project. At our scoping meeting we will outline the key milestones to meet with this committee and the types and frequency of communication desired.

Define Project Evaluation Criteria: Defining the project objectives and the evaluation criteria by which you will assess design alternatives at the outset of the project is critical to transparency and building understanding and consensus. Based on community input to date, these objectives could include improved pedestrian safety, new bicyclists accommodation, increased outdoor dining, placemaking, improved traffic flow, as well as cost and maintenance considerations.



Define Decision Process: We will define the decision-making process with the Town in the scoping meeting so that it is well-defined and transparent from the onset. The development of project objectives and evaluation criteria will be crucial to this process.

Outline Project Schedule: We understand the momentum that the Town has built around their improvement efforts, and we want to help keep that moving in a forward direction. Establishing a project schedule to include public engagement events, milestone deliverable dates and anticipated review timelines will be critical to delivering this project in a timely fashion for the Town of Needham.

Quiet Zone Application: The early stages of this project will be the time to get the ball rolling on the Quiet Zone Application to the Federal Railroad Administration (FRA). We have extensive experience working on MBTA projects and understand the process required to establish a Quiet Zone.

Data Collection: Traffic data, including but not limited to vehicle, pedestrian, and cyclists turning movement counts, automatic traffic recorder counts, crash data, as well as other approved developments in the area will be critical to gather early in the project life. This data will help to inform critical improvements and potential limitations along the corridor as the three alternatives come to life.

Reimagined Great Plains Avenue Project Objectives

Project Evaluation Matrix: In conjunction with feedback from the public design charette, we will use the defined project evaluation criteria to provide a Project Evaluation Matrix (please refer to an example matrix in the image to the right), to communicate the degree to which each design alternative meets the desired objectives. These criteria could be refined and possibly weighted through the community engagement process.

Outreach and Communication Plan

Reimagined dreat Flams Avenue Froject Objectives

	Experience				Infrastructure							
Community Vision/ Design Objectives	Pedestrian Safety	Bicyclist Safety	Traffic Flow	Side Street Traffic	Placemaking/Outdoor Dining Increase/Gathering space	Dedicated Bicycle Lanes	Wider Sidewalks	Maintain On-Street Parking	Street Trees	Maintenance	Economic Impact	Cost
Alternative 1												
Alternative 2												
Alternative 3												

Community Objectives are Met				
Poor				
Good				
Very Good				

Note: Other amenities in Selectboard Survey fit in to all alternatives
- Gateway Treatments

Wayfinding Signage

We recognize that there are levels of authority that govern the ultimate decisions, including the Needham Select Board and any appointed project committees. Adjacent to that decision-making structure, we believe strongly in the inclusion of community engagement in every step of our process.

Based on our experience in other communities, we value a transparent community engagement process in which all stakeholders and participants can 1) obtain understandable information proactively, 2) engage with designers and decision-makers to have their questions answered and 3) have their opinions heard throughout the process. We place a high merit on clearly developing



project objectives with the Project Advisory Committee, soliciting community input on top concerns, assisting in determining priorities and building consensus to help the governing bodies get to a preferred design alternative.

During the project process and at key events, we work with all participants to develop consensus to meet the economic, development, societal, cultural objectives of a community. In our experience, projects that embody these traits can more easily achieve compromise and approval than projects that due "the required minimum" of a surface level engagement with flyers and a public hearing.

Fuss & O'Neill has dedicated staff with extensive experience with public communication, media relations, social media campaigns as well as the design and facilitation of in-person and virtual meetings, charrettes, and workshops. We excel at collaboration between residents, private business, community organizations and public agencies.

To that end, below is a brief outline of the Outreach and Communication Plan for the Great Plain Avenue Downtown Redesign project which will ensure informed participation and build consensus for a fundable and constructable final design that reflects the community's needs and aspirations.

- Form Project Advisory Committee
- Create project communication and description language
- Promote project and update digital engagement platforms
- Identify stakeholders for engagement
- Promote Public Design Charrette #1
- Meet with stakeholder organizations
- Host Public Design Charrette #1
- Update digital engagement platforms with Charette #1 outcomes
- Promote Public Design Charette #2
- Meet with stakeholder organizations
- Host Public Design Charette #2
- Update digital engagement platforms with Charette #2 outcomes

In addition to this plan, we want to work with the Town to understand outreach and communication strategies that have (and have not) worked in the community in the past. We want to learn from your previous efforts, enhance the components that were successful and build on those experience to ensure the community is engaged throughout this process. For the Great Plain Avenue Downtown Redesign Project we will use the tools outlined herein to develop a plan with you that will ensure informed participation and consensus for a fundable and constructable final design that reflects the community's needs and aspirations.

Based on our initial understanding of the project needs, the first Public Design Charette will be critical to the project's success. The Needham Great Plain Community Design Charrette #1 will be an intensive, 2-day multi-disciplinary workshop with the aim of rapidly developing a design for the project while building consensus around the top priorities and design elements



at the same time. Fuss & O'Neill's team of design experts will facilitate community engagement, get input on community goals and existing problems, and create a schematic design solution for presentation and discussion. This process yields solutions to will address the issues that leaders, stakeholders and citizens have identified as priorities and result in a clear, detailed, realistic design for future construction.

Utilizing Technology for Community Engagement

Our team leverages technology to enhance and strengthen connections with participants in our community engagement outreach efforts, utilizing social media platforms and website platforms to expand our reach to populations that cannot attend in-person meetings. Additionally, real-time audience feedback is incorporated into workshops, facilitating the building of consensus and the arrival at shared decisions. Furthermore, the use of graphic visualizations enables us to vividly demonstrate to stakeholders the envisioned future of a project following its design and construction. The QR codes to the left showcase our most recent uses of technology for outreach and engagement projects. Please use your smart phones camera to highlight the QR code and visit the website.

Day 1:

Afternoon Walk-n-Talk

o The Charette will commence with the design team leading a walking tour of the study area. During the 'walk-n-talk,' community participants will have the opportunity to share their observations and concerns about the existing streetscape and communicate elements that they would like to see changed. The walk-n-talk will also provide the design team with the opportunity to highlight components of the existing streetscape and the downtown fabric that impact functionality and vibrancy.

Evening Public Visioning Workshop

o Immediately following the walking tour, community



Downtown Transit-Oriented (TOD) and Revitalization Workshop, Bridgewater, MA



Bristol Bicycle Network - Bristol, RI



RAISE Grant Downtown Revitalization - Manchester, NH



participants will regroup at a downtown venue to conduct a Public Visioning Workshop. The format of the Visioning Workshop will be one-part formal presentation with a facilitated interactive discussion and one-part open house to give participants the opportunity to informally interact and provide feedback to the design team. The primary goal of the Visioning Workshop is to have the community participants provide direct feedback to the design team on three conceptual streetscape alternatives that will be presented at the workshop and ultimately select two preferred schemes that will be further developed on Day 2 of the Charette. The key objectives to achieving that goal are as follows:

- Review of existing conditions and previous studies
 - It is important that the community and the design team are on the same page with the current streetscape conditions and acknowledge the work that the Town has done previously related to the downtown streetscape.
- Long-term urban planning considerations that impact downtown vibrancy in Needham
 - A value-added biproduct of studying Needham's downtown streetscape will be the inherent observations that our planning and design team will have that relate to the Town Center's overall vibrancy. Before our design team zooms-in to focus on the specific components of the streetscape, it is important that we first zoom-out and understand the greater context, fabric, functionality, and utilization of the downtown core. Through this process we identify strengths, weaknesses, and specific opportunities that the streetscape project can potentially address. Additionally, the process will reveal long-term opportunities that contribute to the social and economic vibrancy of the downtown beyond the scope of the streetscape project. The team will identify and present key observations and long-term opportunities for the Town to consider in the future.
- Exploration of 3-Preliminary Conceptual Streetscape Cross-Sections
 - As with any downtown streetscape, the space between building face to building face is limited. Although there are many opportunities to enhance Great Plain Avenue's streetscape, the inherent limitations of the available space require the understanding of trade-offs that accompany the specific utilization of the available space. Based upon the review of feedback from previous streetscape studies in downtown Needham our team will develop 3 distinct conceptual streetscape cross-sections- in advance of the Charette-that include different elements that were identified as important features of the streetscape. The team will present the preliminary concepts and their corresponding trade-offs.
- Facilitate Interactive Discussion
 - Following the presentation of the 3 preliminary concepts our team will facilitate an interactive discussion with the audience to answer questions and gain feedback. The discussion will foster a deeper dive into the pros and cons and corresponding trade-offs of each option.
- Open House
 - During the Open House segment of the Visioning Workshop community participants will have the
 opportunity to visit 'stations' that display each conceptual streetscape cross-section and the listed pros and
 tradeoffs related to that scheme. The participants can directly interact and ask questions of the design team.
 - In addition to the stations that display the 3 preliminary concepts we will have stations that give the Charette participants the opportunity to provide their visual preference on the style and characteristics of the streetscape.



The visual preferences surveys will inform the design team on the preferred direction of overall style such as traditional or modern, which helps to inform geometry, materiality, site furnishings, and lighting. The imagery also helps to inform spatial preferences such as opportunities for outdoor dining, bicycle infrastructure, or green infrastructure.

• The final station will include boards that include all 3 preliminary streetscape cross-sections. The participants will be given three colored stickers that represent their 1st choice, 2nd choice, and 3rd choice. The participants will be asked to place the stickers in order of their preference.

Day 2:

Based upon the feedback received during night one of the Charette and the outcome of the participant preference voting, the design team will spend the second day of the Charette developing two of the three preliminary conceptual streetscape options. Specifically, the design team will apply the goals and objectives of the selected preliminary streetscape cross-sections in plan view for the entirety of the downtown study area. Day 2 will consist of the following key components:

Morning review session with the Study Advisory Committee

o This session will review the feedback and results from the Visioning Workshop, as well as confirm the direction for the day-two design effort.

Internal Design Session

o Immediately following the morning meeting with the Study Advisory Committee, the design team will begin working on the evolution of the selected concepts. The team will prepare hand-drawn streetscape layouts for each option. Additionally, the team will prepare support graphics in the form of cross-sections and 3D mass modeling to effectively communicate the intent of each option.

Evening Design Review Meeting

- O Day 2 of the Charette will conclude with an evening Design Review Meeting. The community will be invited back to see the progress and development of the two selected options. The design team will present each option and further highlight the pros and tradeoffs related to each layout.
 - Following the presentation, the team will facilitate an interactive discussion with the Charette participants to gain feedback.
 - Understanding what the community likes, dislikes, or what they would wish to change about each option
 will be critical for the Town and the Study Advisory Committee to make an informed decision about the
 selection of a preferred alternative or hybrid alternative.
 - In a similar fashion to night-one, the participants will be asked to vote on their preferred option.

Post Workshop Review Meeting with the Study Advisory Committee

- o Soon after the 2-Day Design Charette our team would like to meet with the Study Advisory Committee to review and analyze the findings of the Charette in effort for the Committee to make an informed decision on the selection of a preferred alternative streetscape concept.
 - The selection of a preferred alternative or hybrid alternative will provide the design team with clear direction toward the refinement phase of the project.



Following the outcomes from the first Design Charrette, our team will prepare a refined analysis of the three conceptual level alternatives developed at the Charrette. We will reengage with the Project Advisory Committee and return to Needham for Community Engagement Workshop 2. The objective of this second community engagement event will be to present on the refined analysis of the three alternatives and project evaluation matrix and to build consensus for a preferred alternative. Based on our experience in other communities, below is a list of additional considerations to contemplate in the initial planning and scheduling of the design charettes:

- Accessibility: Ensure all outreach and engagement materials and activities are accessible to people with disabilities.
- Multilingual Communication: Provide translated materials and interpretation services at public meetings to reach non-English speakers.
- Targeted Outreach: Tailor outreach efforts to reach specific demographics and ensure all voices are heard.
- Feedback Mechanism: Establish a clear and accessible system for residents to submit feedback throughout the project, including online forms, email, and phone calls.
- Transparency and Communication: Regularly update the community on project progress, design decisions, and feedback received, fostering trust and buy-in.
- Celebrate Participation: Recognize and appreciate community involvement throughout the project, highlighting resident contributions and the collaborative design process.

By implementing this comprehensive outreach and communication plan, Fuss & O'Neill can ensure that the Great Plain Avenue Redesign Project is truly community-driven, reflecting the needs and aspirations of all stakeholders in Downtown Needham.

Developing the Conceptual Design Alternatives

To aid in the visualization of the future designs for Great Plain Avenue, we will develop conceptual sketches to highlight alternatives that will analyze the corridor for opportunities to reduce the number of lanes as part of a road diet, including identifying the impacts on traffic operations, transit, and non-motorized users. This effort will utilize the Town's survey data and information on Great Plain Avenue, previous parking studies and preliminary designs from 2015 and 2021, as well as the various YouTube videos that the Town has produced referencing the vision for the Downtown area.



Existing Conditions

The following concept renderings are provided as a visualization to showcase potential alternatives. From here, we use these as a tool for communicating the design elements of each option in a more tangible way. Further details cross section concepts are provided in Section 3.

Traffic analysis will play a significant role in the process to aid in determining the best use of public right-of-way on Great Plain Avenue. Fuss & O'Neill is well versed in the most up to date complete streets practices as well as technological advances



in signal equipment. We will work together with the Town's vendors to take advantage of improvements to functionality that aid in accomplishing the project objectives.

To ensure success, Fuss & O'Neill will conduct a robust data collection program to include, but not be limited to, the following:

- Morning and afternoon peak hour vehicle, pedestrian, and cyclists turning movement counts at critical intersection along the corridor
- 48-hour automatic traffic recorder counts at up to four locations along the corridor
- The most recent five years of available crash data as reported by MassDOT's IMPACT system as well as the local Needham Police Department
- Additional approved developments in the area that will generate multi-modal traffic volume on Great Plain Avenue

Furthermore, we have the opportunity to consider traffic counts on Webster Street and Dedham Avenue collected as parts of other Fuss & O'Neill efforts with the Town. We also understand that traffic data has been collected by others as part of the MassDOT Local Bottleneck Reduction Program and may be useful in addition to or in place of what is outlined above. In coordination with you, we will incorporate any changes as a result of that, or any other relevant infrastructure improvements as part of the No-Build analysis.

Utilizing Synchro and Sidra Capacity Analysis software, we will prepare a 2047 design year condition traffic model for each of the alternative designs. This will give us a full picture of intersection delay and queueing to determine the impacts of potential improvements



Concept 1: Cycle Track - Eliminates two travel lanes in favor of wide sidewalks and bicycle facility



Concept 2: Bike Lanes - Similar to concept one bike lanes are single directional instead of bi-directional.



Concept 3: Turn Lane - Maintains a third vehicle lane. No dedicated bicycle facilities provided. Adds sidewalk buffer.



and assess their viability throughout the length of the corridor. Our traffic engineers will be prepared to discuss the impacts of the proposed alternatives with the community at all engagement events.

Additionally, Fuss & O'Neill will prepare high level cost estimates and will identify potential funding sources and implementation phasing for each of the three design alternatives. We will also assess any local, state, and federal permits required to complete the recommended improvements.

The process outlined above in the Outreach and Communication Plan as well as the development of the conceptual alternatives will be summarized in a



Concept 4: Wider Buffers - Provide more room for trees. Two travel lanes.

technical report for the Town of Needham. This report will include materials used in both Public Design Charettes, meeting notes from all gatherings of the Public Advisory Committee and stakeholders, as well as narrative describing each of the conceptual alternatives and the traffic analysis that supports them.

Pilot

During the engagement and design process, it is possible that an alternative will be identified that warrants some level of real world exposure before being solidified as the preferred design. Fuss & O'Neill will be prepared to design and implement a pilot program if applicable to test the desirability of a scheme for local stakeholders. Given the nature of the public right of way, it is also possible that piloting the preferred solution will not be viable, but Fuss & O'Neill will work with Town staff to make that determination.

Preliminary and Final Design Submissions

The aforementioned Outreach and Communication Plan as well as the development of the three conceptual alternatives will be utilized to support the Town of Needham's design selection decision-making process to arrive at a preferred alternative design for Great Plain Avenue.

Preliminary Design Deliverable (25%)

The preliminary design will commence in full throttle after the preferred alternative is determined. The intention is to deliver a preliminary design plan and estimate in September. The level of detail presented in September will be dependent on the timeframe available following the preferred alternative selection.

At minimum the 25% design plans are intended to include the following sheets: Title Sheet and Index. Key Plan, General Notes, Typical Sections, Construction Plans, Traffic Signal Plan, (Color) preliminary Drainage and Utility Plan, Pavement Marking and Signing Plan, Traffic Sign Summary, and Landscape/Streetscape Plan. The remaining sheets will be developed time permitting



or may be delivered in the 100% plan. The additional sheets likely include Construction Details, Profiles, Grading and Curb Tie Plan, and Traffic Management Plan. Design plan and estimate work will be performed in accordance with Town standards, AASHTO, MUTCD and MassDOT design standards in that order of preference.

It is understood that this design stage will be reviewed by the Town staff, Project Advisory Committee, as well as key stakeholders in the design process. During the scoping phase of the process, we will determine appropriate review times for all involved parties and a draft schedule for the project is included later in this document to be used as a starting point.

Final Design Deliverable (100%)

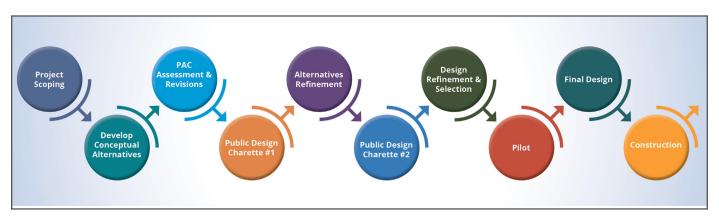
The final design will commence following input from stakeholders on the preliminary design. The level of effort will be dependent on the number of design change requests and level of detail achieved at the preliminary design stage. The intention is to deliver a final design plan that includes all details required for construction for review by the Town. The following tasks will be performed during final design:

- Address Preliminary Design Comments
- Develop Curb Tie & Grading Plans, Drainage and Utility Plans, Streetscape Details, Roadway Details, Traffic Management Plan, Construction Cost Estimate
- Final Design Quality Control

It is again understood that this design stage will be reviewed by the Town staff, Project Advisory Committee, as well as key stakeholders in the design process. During the scoping phase of the process, we will determine appropriate review times for all involved parties and a draft schedule for the project is included later in this document to be used as a starting point.

Construction Documents & Bid Stage Services

Following final design, Plans & Spec's & Estimate (PSE) deliverable, documents will be reviewed and prepared for bidding and construction. The level of effort and deliverable of bid documents will the level of revisions to develop the bid documents. Biding assistance will be provided and is dependent on the level of support that the Town requires. The intention is to advertise bid documents in March, and to commence construction in Spring 2025.





Construction Administration

Consultant construction administration support is intended to be provided through an amendment and is not outlined in this proposal. It is recommended that a construction administration scope of work be developed following the delivery and review of the final design plans. The construction administration scope is dependent on the complexity and duration of the design proposed, and level of engagement with Town staff.

Project Schedule

A central tool in this approach is to work with the Town of Needham to create an intentional Critical Path/Project Schedule that integrates the activities of data gathering, information sharing and education, existing conditions assessment, program creation, evolution of design concepts and community engagement with feedback cycles with decision-makers and stakeholders. This intentional process builds on itself as it moves forward through time and phased decisions to create consensus. For the Great Plain Avenue project, we have examined your scope closely and recommend the following calendar to meet your timeline and task goals, with potential dates.

March 2024

Contract award

Scoping meeting

Identify Project Advisory Committee and key stakeholders

Commence basemap development work

Update digital engagement platforms

April 2024

Define Town decision-making criteria and process

Promote Public Workshop 1

Meet with stakeholder organizations

Conduct Technical Analysis to support 3 Alternatives

May 2024

Hold Public Workshop 1 – Community Design Charette

- Share existing conditions
- Share precedents
- Active design stations to collaborate and show tradeoffs of Alternatives
- Preference data collection (additional data analysis based on community needs)
- Inform about next steps

Begin Preliminary Design

Promote Public Workshop 2



June 2024

Promote Public Workshop 2 – Alternatives Recommendation

Meet with stakeholder organizations

Conduct Further Technical Analysis on Alternative

Hold Public Workshop 2 – Alternatives Recommendation

- Present two design options and tradeoffs
- Stations to answer questions, measure preferences
- Inform about next steps

July 2024

Complete Preliminary Design (10%)

September 2024

Submit Preliminary (25%) design to Select Board

Provide cost estimates for May Town Meeting funding process

February 2025

Submit Final (100%) design to Select Board with updated cost estimates

April 2025

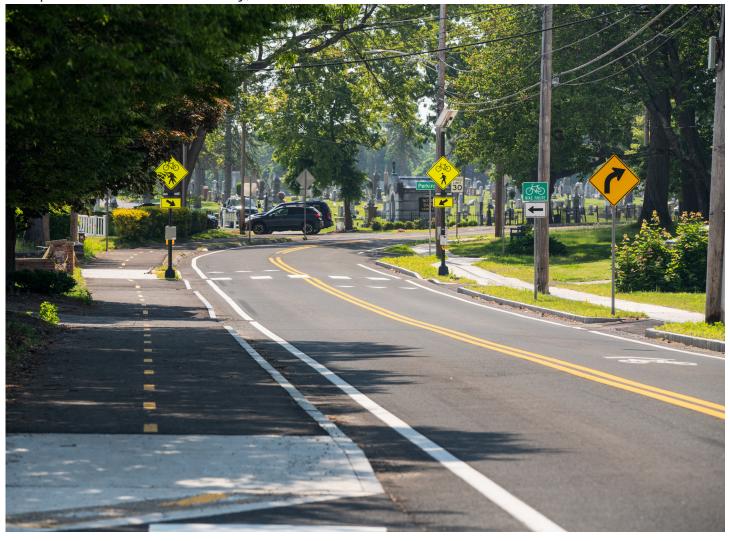
Submit final PS&E design and bid specifications

August 2025

Commence construction

SECTION 2 Project Team

Complete Streets - South Hadley, MA





Organizational Chart

City of Needham

Downtown Redesign - Great Plain Avenue Corridor 24DPW189M

Principal-in-Charge

Kevin Johnson, PE, PTOE, NETTCP

Project Manager

Matthew Skelly, PE, PTOE

Client Manager, Complete Streets Advisor

Eileen Gunn, AICP

QA/QC

Nicholas Lapointe, PE

Project Team

Complete Streets Design

Task Lead

Patrick Tierney, PE

Support Staff

Katherine Patch, PE

Connor Argo, EIT

John Deskavich, PE, ENV SP

Matthew Taylor, PE

Nicole Fox, PE

John Guzze, PE

Downtown Vibrancy

Task Lead

Ian Law, RLA

Public Outreach and Engagement

Task Lead

Arnold Robinson, AICP, NCI, WEDG

Support Staff

Jamie Bratt

Chelsea Zakas, ACIP, NCI, CC-P

Landscape Architecture/ Urban Planning

Task Lead

Ian Law, RLA

Support Staff

Andrew Bohne, RLA Michael Frederick

Traffic/Parking

Task Lead

Matthew Skelly, PE, PTOE

Support Staff

Tyler de Ruiter, PE, PTOE Steve Savaria, PE, PTOE Katherine O'Shea

MBTA / Rail

Task Lead

George Klevorn, AICP, ENV SP

Grant Support

Task Lead

Eileen Gunn, AICP

Support Services

Utilities

Lighting

Stormwater

GIS

Michael Nelson, PE

Kevin Sullivan, PE, LEED AP

Kevin McGarry, PE, MCPPO

David Cook





Kevin Johnson, PE, PTOE, NETTCP

Principal-in-Charge | MBTA Rail

"I am energized by the ability to lead and collaborate with my team on infrastructure projects that positively impact the lives of so many people while partnering with our clients to ensure we are developing the best solution for long-lasting improvements."

kjohnson@fando.com

401.533.5964

EDUCATION

BS, Civil Engineering - 1992 Roger Williams University

LICENSES & REGISTRATIONS

Professional Engineer MA Professional Engineer RI Professional Traffic Operations Engineer

PROFESSIONAL AFFILIATIONS

American Public Works Assoc Inst Transportation Engineers Massachusetts Highway Assoc

EXPERIENCE

29 years Professional Experience

Kevin is Fuss & O'Neill's Executive Vice President of Business Development. Kevin builds strong teams, both internally to support projects and externally to realize the visions of his clients. His leadership and experience translate to transportation solutions that improve existing infrastructure and establish long-term safety. He understands how innovative design can promote economic development and create livable communities. He considers projects from all angles: safety, public usability, stakeholder concerns, future growth, feasibility, practicality, funding, and constructability. He will listen to your ideas, understand your concerns, and deliver a project that exceeds your expectations.

Kevin brings more than 25 years of experience in transportation engineering, which includes a strong focus on highway, bridge, design-build, and traffic-related projects.

REPRESENTATIVE PROJECTS:

Projects prior to joining Fuss & O'Neill

Transit Authority (MBTA), Bridgewater, MA: As
Project Engineer, Kevin performed analysis and design
of an interconnected network traffic signal system.
The system consists of five intersections within a onemile radius. Work included geometric and drainage
improvements to all five intersections.

Railroad Rehabilitation, Massachusetts Bay Transit Authority (MBTA), Scituate, MA: As Traffic Engineer, Kevin performed the study and design of traffic control devices required at all grade crossings for the Greenbush Commuter Rail Line from Braintree to Scituate. The project also analyzed and designed 43 intersections, including access to commuter rail



stations, and designed a roundabout in Scituate.

MBTA Middleboro and Plymouth Commuter

Rail, Middleboro and Plymouth, MA: Kevin was a senior engineer responsible for civil/site and traffic engineering services along the Middleboro and Plymouth commuter rail lines. He performed parking lot layouts, station site designs, grade crossing analyses, stormwater calculations and multi-modal access for bikes, pedestrians and wheelchair ramps

bikes, pedestrians and wheelchair ramps. MBTA Greenbush Commuter Rail, Braintree and Scituate, MA: Kevin performed study and design of traffic control devices required at all grade crossings for the Greenbush Commuter Rail Line from Braintree to Scituate. The project also analyzed and designed 43 intersections, including access to commuter rail stations, and designed a roundabout in Scituate. In addition, Kevin performed civil/site design on numerous new station layouts, parking lots and platforms for ADA accessibility along the entire Greenbush corridor. Bridge, Highway, Traffic and Tolling Projects, RIDOT: As Officer-in-Charge and Program Manager, Kevin was responsible for project controls, client services, dedication of resources, contracting with RIDOT and the commitment of subconsultants. Kevin worked closely with key internal staff and routinely met with RIDOT project managers to attend progress meetings, conduct client audits on a quarterly basis and, if necessary, implement action plans that improve deliverables, schedule and communication. Recent RIDOT programs that Kevin has been Program Manager include: SRTS Task 4 - Warren Composite Pedestrian Bridge; Routine Bridge MSA Task Order Contract, Group 5 Bridge – I-95 - 12 structures, 146 Bridges - 4 structures; RhodeWorks Truck Toll Study and Legislative Support; Truck Toll

Design/Build – subconsultant to Kapsch; SRTS Task 3 – Westerly, Smithfield, Woonsocket; HSIP Road Departure Mitigation Contract 1; On-Call Traffic Engineering; Richmond Roundabout.

On-call Services, Rhode Island Turnpike and Bridge
Authority (RITBA): As Officer-in-Charge and Program
Manager for the RITBA on-call engineering/tolling
contract, Kevin was responsible for the project controls,
quality of work, management of resources and overall
client satisfaction on a number of high profile projects.
These included the Route 138-Newport interchange
improvements, the Route 138 signage improvements,
the Toll Plaza Safety Study and the Pell Bridge Median
Barrier projects.

Infrastructure Projects, New Bedford, MA: As Officerin-Charge and Program Manager for all infrastructure projects in New Bedford, Kevin was responsible for strategic CIP planning, grant writing, securing funds, community outreach, public private partnerships, and managing millions of dollars in construction costs for the city's Infrastructure Improvement Program. As a trusted partner in the city, he spearheaded complex and visionary programs that promote economic development, civic pride and workforce development. A few key projects where Kevin provides Program Management, funding assistance and public outreach include: \$10 million - Kings Highway Transportation Improvements – TIP funding; \$7 million Acushnet Avenue Improvements - TIP funding; \$4 million Union Street -MassWorks Grant; \$6 million Mill Street Improvements -TIP funding; \$5 million Coggeshall Street Improvements -TIP funding and grants; \$5 million Rail extension to South Terminal - Grant, P3 funding.





Matthew Skelly, PE, PTOE

Project Manager | Traffic/Parking Task Lead

"Helping to improve the lives of the people around me has always been at the root of what drives me. I am lucky to have the opportunity to affect real change in my community and make it a better place to live."

mskelly@fando.com

617.379.5892

EDUCATION

BS, Civil / Environmental
Engineering - 2006 University of
Massachusetts Amherst

MS, Civil / Environmental Engineering - 2013 University of Massachusetts Amherst

LICENSES & REGISTRATIONS

Professional Traffic Ops Engineer Professional Engineer CT, MA, NH, RI, NJ, IL, PA, OH, MI, MD

PROFESSIONAL AFFILIATIONS

Inst Transportation Engineers NBM Highway Assoc

EXPERIENCE

14 Years Professional Experience

Matthew is a Senior Project Manager in the Traffic/Highway Group of Fuss & O'Neill's Transportation Business Line. He has a wide range of experience in traffic impact analysis, feasibility and planning studies, transit planning studies, traffic calming, traffic signal design, and roadway design. His expertise includes transportation planning, traffic assessment studies, and traffic signal design. Matthew is familiar with Massachusetts and Connecticut Departments of Transportation procedures and permitting processes, as well as roadway and traffic signal construction practices. Computer application experience includes SYNCHRO, HCM, AutoCAD, MicroStation, and Arcview GIS.

REPRESENTATIVE PROJECTS:

Dedham Avenue Traffic Calming, Needham, MA: Senior

Transportation Engineer for transportation engineering design services for traffic calming improvements.

Improvements included restriping of the roadway to incorporate traffic calming, bicycle lanes, and sharrows, widening of the sidewalk to increase pedestrian safety, and updating two wheelchair ramps to meet ADA requirements.

MBTA Quincy Bus Maintenance Facility, Quincy, MA: Matt was the Project Manager and QC lead for the design of a new intersection to accommodate a proposed bus garage on Thomas E. Burgin Parkway in Quincy. This project required an extra-long mast arm and significant coordination among state, municipal, and private stakeholders.

Bottleneck Prevention Mitigation, MassDOT, Various Locations, MA: Program Manager for bottleneck mitigation design efforts with MassDOT. This includes the oversight of multiple projects and a QC role for all plans, specifications,



and proposals.

Blue Hill Avenue Bus Priority, MBTA, Boston, MA: As subconsultant to WSP, Fuss & O'Neill provided traffic engineering, bike & pedestrian services for the redesign of a three-mile stretch ofBlue Hill Avenue. Matt is Fuss & O'Neill's Project Manager, and he is leading the traffic analysis and design. The project corridor is a vital connector of the Roxbury, Dorchester, and Mattapan neighborhoods for vehicle, bus, bicycle, and pedestrian traffic that is lined with residential, commercial and institutional land use buildings. Services provided include bicycle and pedestrian design in accordance with local and state guidelines, ADA compliant upgrades of pedestrian ramps, signal equipment, and clearance times, traffic engineering and signal design.

Neighborhood Safe Streets Improvements, Boston
Public Works Department, Boston, MA: Matt is the
On-call Manager for Fuss & O'Neill's contract to design
safety improvements across the City of Boston on
neighborhood streets. This fast-paced series of contracts
requires a tight QC plan, which Matt designed and
executed.

Ricciuti Drive Roundabout Design, Quincy, MA:

Project Manager for two potential roundabout options to improve conditions at the intersection of Ricciuti Drive and Willard Street. These sketch-level designs were determined to be the optimal long-term solution after quantitative and qualitative analyses of stop-controlled revised geometry, full signalization, addition of a roundabout, and addition of a roundabout with a bypass lane as potential improvements to reduce crashes, to improve vehicular flow, and to add pedestrian and cycle facilities.

Quincy Avenue Shared Streets Design, Quincy, MA:

As Project Manager, Matt prepared Quincy's MassDOT Shared Streets Application. The goals of this project are to calm traffic; provide safe connection to the harbor, Weymouth Landing MBTA Station, Quincy Center MBTA Station, and commercial areas; improve pedestrian safety; and improve travel times for buses. The existing four-lane roadway has high speeds, lacks adequate pedestrian crossings, and lacks cyclist accessibility. Modifications are designed to expand Quincy's growing bicycle network and promote multi-modal connections throughout the network.

Charles Street Improvements, Boston, MA: Project
Manager for roadway safety improvements under the City
of Boston's Neighborhood Safety and Mobility Program.
Fuss & O'Neill collected data on capacity analysis of
traffic for the roadways within the project limits. Design
documents were prepared with complete streets
improvements, signal improvements, and pedestrian
safety improvements. Fuss & O'Neill also engaged
with the public to inform stakeholders of proposed
improvements.

West Main Street Corridor Study, NVCOG,

Waterbury, CT: Senior Transportation Engineer for corridor study along West Main Street to address safety and traffic flow concerns. The goal of the study was to identify solutions that will provide improved pedestrian, bicycle, and transit-user accessibility. The Fuss & O'Neill team led meetings, developed presentation materials, and set up correspondence/communication tools for public engagement of the community through a project website, informational graphics, social media outreach, and online surveys. Coordination with CTDOT was necessary through active participation in a Project Advisory Committee.





Eileen Gunn, AICP

Client Manager, Grant Support, and Complete Streets Advisor

"To me, climate resiliency is the single most important issue of our time and I can't think of anything that it doesn't impact. It is an all-hands-on-deck situation and I want to utilize my skills and experience to develop and implement innovative solutions to rapidly address this challenge."

egunn@fando.com 617.379.5879

EDUCATION

BA, Geology - 1985 University of Connecticut

MA, Environmental Policy - 1998 Tufts University LICENSES & REGISTRATIONS

PROFESSIONAL AFFILIATIONSWomen in Transportation (WTS)

EXPERIENCE34 years Professional Experience

Eileen is a Transportation Business Line Manager in our Boston office. With her broad range of skills and knowledge, she assists municipalities throughout Massachusetts to identify and meet their transportation and community-wide climate resiliency needs.

Prior to joining Fuss & O'Neill, she served as the Municipal Grants Program Administrator for the Massachusetts Department of Transportation's (MassDOT) Highway Division and she was responsible for assisting municipalities in all aspects of program and project implementation. She co-developed and managed the Complete Streets Funding Program and administered the Small Bridge Funding Program. In addition, she worked on the environmental review of transportation projects, asset climate vulnerability assessment, toxic use reduction, hazard communication, and sustainable transportation efforts.

REPRESENTATIVE PROJECTS:

Downtown Transit-Oriented Development (TOD) and Revitalization Workshop, Bridgewater, MA:

Public Engagement Lead for the Town's "Vision to Reality" project; a multidisciplinary downtown revitalization and TOD redevelopment initiative. Fuss & O'Neill designed and facilitated a public workshop for over 250 stakeholders and residents to expand community understanding and gather public feedback. The project will improve connectivity between the downtown and surrounding neighborhoods, preserve the community's historic character, revitalize underutilized properties, improve transit facilities, foster new residential development, and catalyze economic growth by attracting new start-ups while retaining existing businesses.



New Britain's Complete Streets Roadmap, City of New

Britain CT: Project Manager for a city-wide planning effort to re-envision the city streets for all roadway users and utilize complete streets to enhance economic development, and improve state-owned roadways, city gateways, and neighborhoods. Eileen worked closely with the Department of Public Works to analyze current deficiencies and needs and developed conceptual designs for 10 projects.

Complete Streets Prioritization Plan, Swansea, MA:

Project Advisor for the development of a Five-Year Complete Streets Prioritization Plan. This project includes initial review of available studies and an existing conditions evaluation. The evaluation focused on the presence, location, and condition of bicycle, pedestrian, and transit infrastructure. Specific tasks included performing: a network gap analysis; an ADA; survey, a bicycle, pedestrian, and transit infrastructure evaluation; a roadway and intersection crash analysis, and other appropriate analyses. After this initial work, the project focused on development of 30 conceptual projects, which included project selection criteria and project prioritization for public review. Cost estimates for feasible projects were developed. The effort resulted in a successful grant award for Swansea's first Complete Streets project.

Resilient Main Street, Wareham, MA: As Project Manager, Eileen is leading an interdisciplinary team of coastal and water resource scientists, geotechnical engineers, and landscape architects to examine future sea level rise and storm surge impacts on Wareham's downtown commercial district in conjunction with redevelopment planning. With stakeholder engagement, the project will produce a conceptual plan for site and neighborhood scale that reduces risks and creates

community co-benefits.

Mattapoisett Neck Road Resiliency Project, Town of Mattapoisett, MA: Project Manager for a 2021 Coastal Zone Management Coastal Resiliency Grant. Eileen led an interdisciplinary team of coastal and water resource scientists, and geotechnical and transportation engineers to examine future sea level rise and storm surge impacts, analyze and develop conceptual alternatives for the low-lying roadway and culvert with emphasis on nature-based living shoreline solutions. She also developed the stakeholder engagement plan, oversaw the development of the project website and managed the stakeholder and public engagement process.

Municipal Grants Program Administrator, Massachusetts Department of Transportation,

Boston, MA: Prior to joining Fuss & O'Neill, Eileen Developed and administered the model Complete Streets Funding Program and managed the municipal Small Bridge Grant program for MassDOT. She served as a municipal liaison and assisted communities in all aspects of program and project implementation. She coordinated with District Engineers in reviewing applications, tracking progress, and responding to construction and contractual issues. Eileen identified improvement opportunities and lead teams in streamlining processes, which resulted in significant reduction in contract delivery time, centralized tracking systems, and online application. She delivered 124 municipal construction and 171 technical assistance awards in under four years for Complete Streets. Administrative tasks included delivering progress reports and presentations to the Secretary of Transportation, Highway Administrator, and Oversight Boards, as well as tracking programmatic metrics, budget allocations, and projections.





Nicholas Lapointe, PE

Complete Streets Design

"It is very rewarding to be involved with projects that bring the once vibrant and bustling downtown streets of our communities back to life through creative streetscape and transportation designs."

nlapointe@fando.com

413.333.5474

EDUCATION

BS, Civil / Environmental Engineering - 2008 University of Massachusetts at Amherst

LICENSES & REGISTRATIONS

Professional Engineer MA

PROFESSIONAL AFFILIATIONS

EXPERIENCE

16 Years Professional Experience

Nick has been responsible for numerous highway design projects and traffic engineering studies in western and central Massachusetts and throughout Connecticut. Nick is highly versed in MassDOT design procedures and has coordinated many projects through the state review process into construction. He has assisted numerous communities in acquiring TIP funding and MassWorks infrastructure grants.

Nick's experience includes preliminary and final geometric design of highways and intersections, preparation of construction plans and cost estimates for large highway projects, bike path/rail trail design, Complete Streets implementation and design, parking lot design, municipal and college campus parking studies, traffic signal design, traffic impact studies, and multiple highway design projects conforming to MassDOT design standards.

REPRESENTATIVE PROJECTS:

King Street (Route 5) Corridor Improvements,

Northampton, MA: Project Manager for this

MassDOT corridor improvement project. Intersection
realignment and intersection coordination at three
locations were provided. The design will provide an
extension of the downtown district and includes
Complete Street techniques and an implementation
of a road diet, providing room for a separated bike
lane that connects to the Northampton Bikeway.
LID stormwater techniques are included in the
design, such as on-street rain gardens and tree
filters. Coordination of stakeholders and community
outreach are vital components of this project.

Complete Streets Planning, Town of South Hadley,

MA: Nick served as Project Manager for development



of a prioritization plan for complete streets projects to apply for construction funding assistance under the MassDOT Complete Streets Program. He reviewed the current complete streets Prioritization List and met with the client to discuss and solicit feedback. He then created a GIS map highlighting locations of other potential complete streets projects to be incorporated into prioritization plan. He prepared construction cost estimates and completed the Prioritization Plan. The Town was awarded a grant for their highest priority project (South Hadley Falls CS project) for which Nick designed major striping revisions to Route 116 for separated bike lanes and sidewalk improvements, including APS signal upgrades to the Bridge/Lamb Intersection.

North Street Phase 3 and 4 Streetscape, Pittsfield,

MA: Phase 3 and Phase 4 streetscape projects involved bringing North Street back to life through innovative landscape and streetscape design, made possible by MassWork's Infrastructure grants. Nick served as the lead engineer for both projects, which focused on the pedestrian experience and making downtown a place people want visit. The projects totaled 2/3 of a mile of complex downtown urban streetscape and pedestrian design. This included roadway diets to better accommodate bicycles, traffic signal improvements, mid-block crosswalk enhancements, new roadway and sidewalk lighting system and associated subsurface installations, streetside bio-retention facilities and rain gardens for stormwater treatment, on-street parking, tiered pedestrian sitting walls, updated ADA compliant wheelchair ramps, trees and planters, and many other decorative sidewalk elements. These projects also highlight the successful involvement and coordination

with downtown merchants during both design and construction. Nick played a key role in facilitating the design with these stakeholders throughout both of the projects.

Main Street (Route 2A) Downtown Historic District Corridor Improvement Project, Greenfield, MA: Senior Transportation Engineer to develop roadway and corridor improvements to create a complete street within historic downtown Greenfield. This once-in-a-generation project looks to modernize infrastructure assets and needs of the evolving transportation modes, specifically the pedestrian and cyclist, while maintaining the historic New England landscape that embodies the downtown business district of Greenfield. This project includes multiple public engagement sessions and community outreach strategies that address parking demand, streetscape features, traffic congestion, and utility upgrades. Of particular importance was the preparation of a complex traffic management plan to allow businesses to stay open during full-depth replacement of pavement, sidewalks, and utilities.

The "X" Corridor Project, Springfield, MA: Nick is providing engineering on the "X" Corridor project in Springfield. Rated as the 16th most dangerous intersection in the State, the City of Springfield sought solutions to address public safety issues, decrease the number of accidents, ease traffic congestion, and create an enhanced "sense of place" by making the area a more walkable environment. The improvements included widening parts of Sumner Avenue to five lanes, adding bike lanes, introducing left turn lanes, installing four new traffic signals, and creating mini-roundabouts at two intersections to create a more aesthetically pleasing pedestrian environment while balancing the needs of motor vehicles.





lan Law, RLA, ASLA

Landscape Architecture/Urban Planning | Downtown Vibrancy

"I love the collaborative nature of design. Listening to the needs of the community, working with my team to solve those challenges, and then seeing those designs come to life is the best part about this career!"

ilaw@fando.com

860.426.6039

EDUCATION AS, Aviation - 1993

Embry-Riddle Aeronautical University

BS, Landscape Architecture - 1999, UMass Amherst

LICENSES & REGISTRATIONSReg Landscape Architect NY

PROFESSIONAL AFFILIATIONSAmerican Society of Landscape
Architects

EXPERIENCE

25 Years Professional Experience

With more than two decades of experience, Ian is a recognized leader in urban design and planning, downtown revitalization, as well as community and park master planning. Ian has led, and been a team member for, a number of award-winning national and international projects. As a recognized expert in sustainable design and planning, Ian has presented throughout the country on the importance of integrating planning and design and issues of scale and context when applying the principles of urbanism.

Ian is a firm believer in a collaborative design process, and has led dozens of design charrettes and community design forums. He takes a hands-on approach to design, and is actively engaged in all phases of a project, from schematic design to construction documents and construction administration.

REPRESENTATIVE PROJECTS:

Lexington Center Workshops, Lexington, MA: Over a period of two days close to 150 Lexington residents participated in workshops to develop strategies and goals for addressing the challenge of shaping the future of Lexington Center into a vibrant, prosperous, walkable Town Center. Building on the Comprehensive Master Plan created in 2022 and Strategic Tourism Marking Plan in 2020 set the stage for residents and Town leaders to explore a range of options for guiding and leading the future evolution of the Lexington Center study area. The consultant team features the unique blend of Mullin Associates' policy, economic and public participation expertise with Fuss & O'Neal's team leadership, physical planning and participatory design skills.



Study, Schenectady, NY: As the project lead, Ian is

Albany and Crane Streets Complete Streets

overseeing the conceptual design solutions and public outreach and engagement efforts for the creation of safe and inviting streets for all travelers (including pedestrians, cyclists, and transit riders) for the Albany and Crane Streets study area. The multi-disciplinary team of Landscape Architects and traffic engineers examined four key corridors within the Hamilton Hill and Mont Pleasant neighborhoods. Following a comprehensive analysis of the existing conditions which included a detailed traffic report, the team conducted several public outreach and engagement activities throughout the neighborhoods to gain feedback and insights from community residents, business owners, community organizations, and key stakeholders. The engagement effort culminated in the team's development of plans and sections for streetscape improvements that featured measures to reduce vehicular speeds, delineate on-street parking, and improve walkability through the combination of new curb lines and the addition of street trees. In the neighborhood's business centers, bump-outs have been introduced to calm traffic, reduce pedestrian crossing distances and enhance the opportunity for

Craig and Main Streets Complete Streets Study, **Schenectady, NY**: With a previous firm, lan led a multi-disciplinary team of designers, engineers, and planners for the award-winning neighborhood-based complete streets project that reflects the ideas and inspirations of the community to transform the Craig Street and Main Avenue Corridor into a safe, inviting, and inspiring connection between residents and

points of interest. The focus of the design effort was to transform the automobile-oriented neighborhood corridor to one that considers all travelers (including pedestrians, cyclists, and transit riders) and enhance the linkages between community anchors such as schools, economic centers, and not-for-profit community organizations. The design featured a road diet that enabled a dedicated and buffered 2-way cycle track, and wider sidewalks with street trees.

Main Street Green Infrastructure Streetscape,

Village of Sidney, NY: Following the disastrous events of Hurricane Irene and Tropical Storm Lee, lan (with a previous firm) led a team of specialists in the coordination and execution of award-winning resilience planning and implementation projects for the Village of Sidney, NY. Key to that effort was the design of a green infrastructure streetscape for Main Street in the Village's center that would provide nature-based stormwater management and additional flood storage, while also providing an attractive, safe, and inviting environment for visitor and patrons of the village center. lan's multi-disciplinary design team reduced excessive lane widths on Main Street to calm traffic speeds and provide an expanded sidewalk zone. The expanded sidewalk zones and bumpouts at key intersections offered the opportunity to feature a series of linear rain gardens that naturally treat stormwater runoff from both the street and the sidewalk. Once filtered by the rain gardens the stormwater is collected in a reservoir below the sidewalk. The streetscape also highlights placemaking with enlarged areas for public seating, outdoor dining, public art, decorative lighting, and bicycle parking.

placemaking.





Arnold Robinson, AICP, NCI, WEDG

Public Outreach and Engagement Task Lead
"I'm so proud that the people I work with, the planners,
engineers, preservationists, architects and citizen activists,

can look at the world and see all the possible futures. They can see past the abandoned building, the polluted site, the flooded river and envision a future condition that is so much better. Even more impressive, after they have a vision, they have the skills and drive to make it happen!"

arobinson@fando.com 401.533.5983

EDUCATION

BA, American Studies - 1987 Bates College

MA, Preservation Studies - 1994 Boston University **LICENSES & REGISTRATIONS**

AICP WEDG Associate **EXPERIENCE**

36 Years Professional Experience

Arnold has been practicing in the fields of community planning, historic preservation and rehabilitation, education, and urban design for more than 35 years. His expertise includes work in the public, private, and not-for-profit sectors as project manager, executive director, and designer. His diverse career has included master planning, feasibility analysis, multidisciplinary project collaboration, site design, public process facilitation, regulatory permitting, historic rehabilitation project design, bidding and construction administration.

Arnold's diverse role at Fuss & O'Neill includes community planner, public process designer and facilitator, and historic buildings and communities consultant. He is passionate about effectively and efficiently engaging community residents, public officials and diverse stakeholders in the planning and review process in order to maximize consensus and minimize project delays.

REPRESENTATIVE PROJECTS:

Downtown Transit-Oriented Development (TOD) and Revitalization Workshop, Bridgewater,

MA: Arnold served as Project Manager for the Town's "Vision to Reality" project; a multidisciplinary downtown revitalization and TOD redevelopment initiative. Fuss & O'Neill designed and facilitated a public workshop for over 250 stakeholders and residents to expand community understanding and gather public feedback. The project will improve connectivity between the downtown and surrounding neighborhoods, preserve the community's historic character, revitalize underutilized properties, improve transit facilities, foster new residential development, and catalyze economic growth by attracting new startups while retaining existing businesses.



Municipal Vulnerability Preparedness (MVP)

Program Grant Applications and Project
Implementation, Statewide, MA: Arnold served
as planning lead for Fuss & O'Neill's Municipal
Vulnerability Preparedness (MVP) Program Grant
practice, which assists municipalities across
Massachusetts identify threats and hazards associated
with climate change and flooding events. Our team
works with municipality officials to acquire funding
for these projects, mitigate these challenges, and to
develop strategies to implement long-term solutions.

Placemaking and Bike Path Improvements,

Warren, RI: Arnold served as Project Manager for bike path improvements that increased safety and urban design function at one of the busiest bike/roadway crossings in the state. Improvements included integration of public sitting areas, bike parking areas, and public art installation/performance areas that mesh with existing local businesses and attractions.

RI: Project Manager and Community Engagement
Facilitator for creation of a Resilience Plan for the lowlying Bay Spring neighborhood, which is surrounded by
waterbodies on three sides, is almost entirely located
within FEMA flood zones, and is southwest-facing,
so it receives direct wave action from Narragansett
Bay. Engagement of community stakeholders to
identify specific projects and actions that could be
implemented to increase the neighborhood's climate
resilience was the initial goal of this project. To reach
as many residents as possible, outreach was built
on a strong digital platform of a customized project
website, social media promotion and input, direct

feedback through project email portal, and constant

updating of information and engagement platforms.

Resilience measures discussed included mitigating coastal erosion, treating and managing stormwater runoff, protecting infrastructure, and improving emergency preparedness and post-event recovery.

The Plan includes a combination of natural systems (e.g., planned marsh migration and coir envelope erosion mitigation) and edge-hardening through riprap supplementation to improve the neighborhood's shoreline and buffer inland areas. Green stormwater treatment practices will promote natural drainage and reduce impacts of stormwater runoff during rain events. This project won the 2020 Award for Excellent Comprehensive Plan from APA RI.

East Bay Bike Path Improvements, Town of Warren, RI: Arnold is the Project Manager for engineering and architectural services to improve the

area near the East Bay Bike Path on the southeast corner of its intersection with Child Street. The design will create a gateway along the bike path, incorporating a public bike rest facility at a commercial node and accommodating visitors. This project involves new paving, benches, plantings, fencing, and bike racks and focuses on accessibility for persons with mobility impairments. To promote economic development, wayfinding signage will be created to promote local business, cultural sites, and local amenities. Fencing and site improvements are included to provide safety and seating for patrons of local businesses.





George Klevorn, AICP, ENV SP

MBTA Rail Task Lead

"I believe that people and communities deserve high-quality transportation infrastructure that takes into account the needs of all users. This ethos of care drives everything I do, and I am extraordinarily grateful for the opportunity to serve."

gklevorn@fando.com

617.830.5797

EDUCATION

BA, History & Political Science -2014 University of Minnesota MS, City and Regional Planning -2018 Rutgers University

LICENSES & REGISTRATIONS

Professional Engineer MA Professional Engineer RI Professional Traffic Operations Engineer

PROFESSIONAL AFFILIATIONS

American Public Works Assoc Inst Transportation Engineers Massachusetts Highway Assoc

EXPERIENCE

29 years Professional Experience

George is a Senior Transportation Planner at Fuss & O'Neill. He has a range of experience in managing complex, multi-modal transportation studies and physical design projects in the context of both regional and state-wide transit agencies, as well as domestic and international consulting in six states and three countries. His primary areas of expertise are in transit capital project planning, market research, communications, geospatial analysis, and graphic design. He combines his technical expertise with effective communication skills to efficiently guide transportation projects from visioning to completion. George has extensive experience with a variety of GIS and graphic design programs and has a rigorous, organized, and quality-oriented approach to projects.

REPRESENTATIVE PROJECTS:

Projects prior to joining Fuss & O'Neill

Newark Penn Station Master Plan, NJ TRANSIT (as Steer employee), Newark, NJ: Headed all GIS actives related to Newark Penn Station Master Planning efforts as Lead GIS Analyst. Analyzed data and produced maps related to demographics, existing transit services, travel time, catchment area characteristics, and other variables. Authored technical memos incorporating GIS maps for inclusion into final master plan.

GO Bus Facility Review and Expansion Study,
Metrolinx (as Steer employee), Greater Toronto,
Canada: Responsible for developing conceptual
alternatives for the siting of 6 GO Bus Facility locations
in Greater Toronto. Advised client on feasibility of siting



locations, utilizing agency data, municipal feedback, and Canadian census products. Produced GIS materials and graphics to improve communication, intraagency support, and coordination between different stakeholders.

Metro Muni Core Capacity Study, SFMTA (as Steer employee), San Fransisco, CA: Advised client on regulatory and grant requirements for applying for and receiving FTA Core Capacity Capital Investment Grant. Recommended process for improving competitiveness of application and steps required to implement that process. Created public presentation materials to strengthen agency and public buy-in.

Caltrans & Capitol Corridor Joint Power Authority
Fare Policy Assessment, Caltrans & CCJPA (as Steer
employee), California: Led Market Research and
Demographic Analysis for Caltrans and Capitol Corridor
Joint Powers Authority Fare Policy overhaul efforts.
Responsible for researching different fare policy
approaches and analyzing effects on low-income,
minority, and low English proficiency populations.
Created GIS and other demographic visualization
materials for final report.

Hudson-Bergen Light Rail Capacity Study, NJ TRANSIT (as NJ TRANSIT employee), Hudson County, NJ:

Served as Project Manager for HBLR Master Capacity

Study. Responsible for updating HBLR ridership

Forecasting Analysis tool, analyzing HBLR operations,

evaluating improvements, and writing Scope of Work

for consultant study. Prepared all relevant background

demographic analysis and provided intra-agency

consulting services to all departments regarding HBLR

capacity improvements.

Greater New Brunswick Transportation Study, NJ
TRANSIT (as NJ TRANSIT employee), New Brunswick, NJ:
Served as Project Manager for Greater New Brunswick
Transportation Study, a comprehensive conceptual
alternatives analysis study for reevaluating the New
Brunswick, NJ area transit network. Responsible for
coordinating and directing the master planning efforts
of two multi-national engineering consulting firms and
managing a \$500k budget. Coordinated all stakeholder
outreach as well as all inter- and intra-agency data
requests.

RiverLINE Bicycle and Pedestrian Accessibility Analysis, NJ TRANSIT (as NJ TRANSIT employee), Mercer, Burlington, and Camden Counties, NJ: Analyzed existing bicycle and pedestrian facilities at 21 light rail stations to identify improvement locations. Rationalized prioritization of station improvements by integrating O&D, access, and market research data. Coordinated allocation of funding across three agencies, leading to final construction.

Language & Low English Proficiency Ridership Study, NJ TRANSIT (as NJ TRANSIT employee), NJ: Project manager for Language and Low English Proficiency Ridership study. Launched survey to determine customer language distribution and low English proficiency populations.

Analyzed survey results and introduced GIS analysis to streamline distribution of customer communication

Departure Monitor ADA Compliance Survey, NJ TRANSIT (as NJ TRANSIT employee), NY & NJ: Managed survey to ascertain customer attitudes towards system-wide departure monitor changes made to be in compliance with ADA requirements. Implemented survey, analyzed results, and supported multi-state rollout of changes.

materials upon completion of study.





Patrick Tierney, PE

Complete Streets Design Task Lead

"My passion is to develop transportation projects that promote healthy lifestyles. Community engagement, safety solutions, active transportation, and open space protection are the cornerstones of my approach to work. My personal lifestyle includes a commitment to coastal activities. This gives me a direct view of the dynamic landscapes that are shaped by climate change and resiliency efforts, fueling a desire address those challenges."

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617.405.5445

EDUCATION

BS, Civil / Environmental Engineering - 2014 University of Massachusetts at Amherst

LICENSES & REGISTRATIONS

Professional Engineer MA Professional Engineer CA

PROFESSIONAL AFFILIATIONS

American Soc Civil Eng

EXPERIENCE

10 Years Professional Experience

Patrick is a Transportation Engineer in our Boston,
Massachusetts office. His technical experience includes
roadway design, transportation planning, and bridge
evaluation. Throughout his career, he has worked on
projects ranging from complex bridge load ratings and
freeway HOV lane additions to bike trail master planning
and local intersection design. Versatile experiences enable
him to coordinate effectively with multi-discipline teams
to deliver innovative and impactful projects.

REPRESENTATIVE PROJECTS:

Intersection Improvements at Adams Street at Whitwell Street, City of Quincy, MA: Project Manager for an alternatives analysis and roundabout preliminary design to accommodate increased traffic due to a nearby housing redevelopment. The proposed design includes a titled plane roundabout cross-slope and asymmetrical vertical approach profile to account for the intersection topography. Civil 3D was used to evaluate challenging approach grades and drainage patterns, as well as to minimize impacts to private properties.

Bottleneck Reduction Project, Hyannis Main Street, Barnstable, MA: Project manager for MassDOT local bottleneck reduction project on Hyannis Main Street in Barnstable Massachusetts. The design included work



at two traffic signals and balanced the Town planning initiative to change the downtown and MassDOTs goal of facilitating improved traffic flow. The resulting project includes new mast arms that can be easily converted to an alternative traffic flow and new pedestrian signal equipment. Construction is planned for fall 2024.

Bark Street Complete Streets Design, Swansea,

MA: Project Manager for the MassDOT Complete Streets program services that included planning, funding, and design for the Town. A cost estimate was prepared for priority projects from that list. Bark Street sidewalks and bike lanes were selected as the top priorities by the Town. Fuss & O'Neill submitted the online application and cost estimate for Bark Street, which was approved for the full reimbursement amount. The design was prepared by Fuss & O'Neill and construction concluded in 2023.

Safety Improvements at Various Locations in District 5, MassDOT, Various Towns: Project Manager for a MassDOT-led project to quickly implement cost-effective safety solutions at priority locations. The program was started as a pilot in District 5 and is currently in the bid document preparation stage. The individual projects include one-way street designation, advance intersection warning signage, multi-modal improvements, right-in/right-out designation, and traffic calming measures.

River Avenue, MassDOT, Somerset, MA: Project Manager for MassDOT pre-25% design for one intersection with high frequency of injury crashes. The work includes a road safety audit, concept development, and alternatives analysis. The design

includes consideration for all users and the regional bike route is located within several hundred feet of the study intersection.

Intersection Improvements on Route 28 at Spring
Street and Harrison Boulevard, MassDOT, Avon,

MA: Assistant Project Manager for MassDOT pre-25% design for two closely spaced intersections with defined safety issues. The work included a road safety audit, concept development, early environmental impact assessment, and alternatives analysis.

North Eastham to South Wellfleet Route 6 Corridor Study, Towns of Eastham and Wellfleet, MA:

At a previous firm, Patrick served as Project Planner and Traffic Engineer performing traffic and safety analyses for the Route 6 corridor between Bracket Road and West Road. The study identified potential alternatives to consider throughout the corridor that were presented in a technical report and presentation to local stakeholders.

Outer Cape Bike and Pedestrian Master Plan,
National Park Service, Wellfleet to Provincetown,

MA: While at a previous firm, Patrick served as Project Planner for multi-town and agency efforts to develop a preferred alternative for a spine connection on the Cape Cod Rail Trail from its terminal in Wellfleet to Provincetown, and list local bike and pedestrian improvements to destinations throughout the Outer Cape Region. This project included technical writing, alternatives analysis, and presentations in coordination with the National Park Service, environmental consultants, and municipal stakeholders.

MassDOT Small Bridge Evaluation Program,
MassDOT, Statewide, MA: While at a previous





Connor Agro, EIT

Transportation Engineer

"As an engineer, each day is an opportunity to make the communities around me a better place."

cagro@fando.com

401.533.5984

EDUCATIONBS, Civil Engineering - 2020
University of Vermont

LICENSES & REGISTRATIONSEngineer In Training VT

EXPERIENCE3 years Professional Experience

Connor is a Transportation Engineer in Fuss & O'Neill's Boston Highway and Roadway Department. He has experience with complete streets, roadway design, rail trail design, traffic analysis, and construction support. Connor is experienced in Civil 3D and is well-versed in MassDOT standards. He strives to improve the communities he works in through developing and implementing innovative designs with an emphasis on safety.

REPRESENTATIVE PROJECTS:

The "X" Corridor Project, Springfield, MA:

Transportation Engineer for the "X" Corridor project in Springfield. Rated as the 16th most dangerous intersection in the State, the City of Springfield sought solutions to address public safety issues, decrease the number of accidents, ease traffic congestion, and create an enhanced "sense of place" by making the area a more walkable environment. The improvements included widening parts of Sumner Avenue to five lanes, adding bike lanes, introducing left turn lanes, installing four new traffic signals, and creating mini-roundabouts at two intersections to create a more aesthetically pleasing pedestrian environment while balancing the needs of motor vehicles.



Intersection Improvements at Ricciuti Drive, Willard Street, and I-93 Off-Ramp, City of Quincy,

MA: Transportation Engineer for MassDOT 25% design for an intersection with defined safety and congestion issues. The work included developing design plans for a traffic signal, cost estimating, soil exploration, technical report writing, and an early environmental impact assessment.

Foster Street Pedestrian and Roadway Improvements, Town of Littleton, MA:

Transportation Engineer for transportation enhancements to support the MBTA commuter rail station, adjacent commercial and residential development, and vehicular movement along Foster Street. Project highlights include 10' shared use path, horizontal and vertical alignment improvements, upgrades to the drainage system, realignment of Grimes Lane out of skew angle with MBTA rail to improve safety, installation of pedestrian scale lighting along the path at the MBTA station, full depth pavement reclamation, significant public and private utility relocations, and potential signals and/or roundabouts.

Mass Central Rail Trail (Segment 1C) Planning and Design, Belchertown MA: Transportation Engineer for the redevelopment of the former Massachusetts Central Railroad into a paved, recreational, multi-use trail known as the Massachusetts Central Rail Trail. Planning includes route alternatives, conceptual plan preparation, trail cross-sections, and construction cost estimates. The project area includes bridges and culverts that are being structurally evaluated and repair/replacement recommendations will be included in the conceptual design.

Wisdom Way Roadway Improvements, Greenfield,

MA: Transportation Engineer for the roadway improvements for the primary connecting road to the Franklin County Fairgrounds and points west of Interstate 91. Phase one of the design included pavement, drainage, safety, and retaining wall stability improvements, MassDOT application assistance, as well as funding application assistance under the TIP program.

Main Street (Route 2A) Downtown Historic District Roadway Improvement Project, Greenfield,

MA: Transportation Engineer to develop roadway improvements to create a complete street within historic downtown Greenfield. This once-in-ageneration project looks to modernize infrastructure assets and needs of the evolving transportation modes, specifically the pedestrian and cyclist, while maintaining the historic New England landscape that embodies the downtown business district of Greenfield. This project includes multiple public engagement sessions and community outreach strategies that address parking demand, streetscape features, traffic congestion, and utility upgrades. Of particular importance will be the preparation of a complex traffic management plan to allow businesses to stay open during full-depth replacement of pavement, sidewalks, and utilities.

Providence Bike Project Final Design, Providence,

RI: Transportation Engineer for final design services for the Pleasant Valley Parkway and Broadway Big Jump Project. This project includes final design, bid documents for on-street and off-street bicycle facilities, and signal improvements in downtown Providence.





Jamie Brätt

Public Outreach and Engagement

"My passion for urban redevelopment sprang to life while riding the Hartford city bus as a college student. My nose pressed to the glass, I was transfixed by the tapestry of craftsmanship, design, labor, law, history, art and community on display. Twenty years of hands-on experience later, I'm just as excited to help clients navigate the complexities of signature development projects."

jbratt@fando.com

860.783.4730

EDUCATIONBA, Economics & Ethics - 2005
Trinity College

EXPERIENCE

19 Years Professional Experience

Jamie is a Senior Vice President and Business Line Leader for Fuss & O'Neill's Community Development Business Line. She is an award-winning planner with direct experience in the public and private sectors. Jamie has shepherded more than \$550 million of real estate investment through complex regulatory processes, earning a position as a trusted advisor to developers and city officials alike.

Jamie is an expert in urban planning, zoning administration, economic development, and securing grant funding for clients. She specializes in projects that require sophisticated collaboration and stakeholder engagement from beginning to end. This unique visionary quality helps blend functionality and artistry into one-of-a-kind community assets that encourage economic growth.

REPRESENTATIVE PROJECTS:

Wall Street Corridor Improvements, CT: Jamie helped facilitate engagement at community charrettes that were conducted to gather feedback from stakeholders in order to create a concept and final design for the project, while keeping the community informed of project progress. Improvements included streetscape enhancements, safe bicycle lanes, pedestrian accessibility, and overall connectivity to local business, event spaces, and downtown areas. Fuss & O'Neill provided preliminary and final design, traffic operations and safety evaluation, and coordination for roadway reconstruction on the Wall Street corridor.

Bridgewater, MA: Jamie is working with the Town of Bridgewater leadership including planning and zoning



and city council for strategic ways to market available parcels to potential developers. Fuss & O'Neill is driving redevelopment efforts throughout the downtown.

Transit-Oriented Development (TOD) North-Master Plan for Public Improvements Pawtucket,

RI: Fuss & O'Neill is facilitating the redevelopment in the Pawtucket-Central Falls TOD District in order to make the area highly walkable and pedestrian friendly, offer opportunities for new business, enliven streets with retail storefronts, and provide public spaces for passive and active recreation. Services included stakeholder engagement, assess the current conditions, and recommend implementation and financing strategies.

Riverfront Recapture, Master Planning,

Hartford, CT: Master planning services for a 77-acre urban park. Services include working in the floodplain and contaminated soil, landscape architecture, programming, community engagement, assisting developers navigate the complexities of redevelopment.

Master Planning, New Haven, CT: Jamie is acting as an Economic Development Advisor to the City of New Haven for large-scale grant applications, strategic opportunities, and advocating with stakeholders. A project example is on Long Wharf where Fuss & O'Neill is providing master planning and schematic design services for the redevelopment study of 13-20 acre parcel that is a mix of medical offices and residences, also a structured parking garage. Fuss & O'Neill is working collaboratively with Camoin Associates and the City of New Haven over multiple workshop meetings to complete programing discussions and up to 3 massing concept options for the planned

improvements, including building locations, vehicular access, pedestrian access, connectivity to abutting parcels and future improvements, park spaces, bioretention areas.

Mary Shepard Place, Hartford Housing Authority,
Hartford, CT: Jamie is advising the Hartford Housing
Authority on land use entitlement strategy on a
complex, multi-phase housing and permitting project.
Fuss & O'Neill is providing civil engineering, landscape
architecture, community engagement, and hazardous
materials services.

Connecticut Children's Medical Center (CCMC) New Building Project, Hartford, CT: Entitlements

Consultant for the new building and pedestrian bridge extending over Washington Street from the new building to a future parking garage. The new building will include 6 clinical programs and 4 support programs in the new building. The design also includes the renovation of existing space for 3 programs. Our services included civil site plan design, construction administration, utility coordination, traffic control plans, and a traffic impact study.

Parking Garage Development, LAZ Parking,

Hartford, CT: Fuss & O'Neill is providing site/civil engineering, landscape architecture, and permitting advisory services for commercial parking garage connected to the Connecticut Children's Tower Expansion. Through her connections, Jamie is coordinating with police and utilities for the relocation of four historic houses for the parking garage development. Services include historic preservation, urban redevelopment, land use reviews, developer coordination.





David Cook

GIS

"Each day I embrace the challenge of assisting our clients' needs in assessing their environmental concerns and proposing a variety of solutions that are both effective and in line with our clients' goals. I believe it is vital to protect our clients' interests while maintaining our country's resources so that both present and future businesses can prosper."

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860.783.4665

EDUCATION

BS, Environmental and Earth Science - 2011 Eastern Connecticut State University

PROFESSIONAL AFFILIATIONS

Env Prof Organization of CT National Groundwater Asoc

EXPERIENCE

12 years Professional Experience

David is a hydrogeologist with broad experience in remedial investigations and hydrogeological investigations, including aquifer testing and tidal influence studies. David specializes in Geographic Information Systems (GIS) technology and, as the administrator to both the GIS Enterprise Sever and ArcGIS Online, he leverages the efficiencies of electronic data collection and project collaboration to meet the modern demands of data-driven projects.

David is an active member in the CT GIS Network. As an elected steering committee member he participates in public outreach and quarterly networking events. David is focused on staying current with the readily available and dynamic progression of web-based GIS tools to ensure that the best resources are being put to work throughout the GIS community. His pursuit promotes internal advances in automation, which allow our services to stay competitive.

REPRESENTATIVE PROJECTS:

Municipal Vulnerability Preparedness (MVP) Field Data Forms, Various Municipalities, MA:

David implemented the use of electronic field data collection forms to streamline the data collection process for more than 1,000 road stream crossings for municipalities in Rhode Island, Massachusetts, and New York. At each identified stream crossing, field staff collected more than 100 data fields and several asset-related pictures on the electronic field data forms. The use of electronic field data collection removed tabulation transcription necessary to perform qualitative batch analysis and QA/QC controls were applied to the data collection form so that no entry was incomplete prior to being submitted. The stream crossing assets were visualized to stakeholders



utilizing web-based applications whereby location points could be clicked on and pop-ups containing the data and photos could be displayed.

Deerfield River Watershed Vulnerability

Assessment, Franklin Regional Council of

Governments, MA: David implemented a streamlined geoprocessing workflow that iteratively assessed and calculated sub-regional watershed characteristics in the Massachusetts Deerfield River Watershed to assess flood risk vulnerability, water quality restoration potential, and water quality vulnerability. Dozens of resources were spatially attributed to each sub-regional watershed for comparative analysis. A model was implemented to automate the repetitive tasks and reduce user error.

Bryant University, Smithfield, RI: Converted legacy CAD drawings into secure cloud based GIS platform. Created user workflow manuals for updating mapped asset items. Devised versioning schema to track existing, historic, verified, planned, and source attributes for mapped assets and related asset tracking database tables. Performed on-premises and virtual trainings for working with ArcPro and ArcGIS for AutoCAD plugins. Implemented autonomous routine secure backups of all hosted online content. Coordinated on-premises and virtual server deployments. Developed mobile and web applications tailored to specified workflows and processes. Geodatabase Design and Implementation, Eversource Energy, CT, MA, and NH: David designed and implemented a centralized geodatabase for Eversource Energy's utility right-of-way assets, resources, and ownership boundaries for select transmission pole replacement projects. The database

structure allowed field team members access and ability to update the most recent versions of the centralized data. Collaborations of multi-phased project planning were streamlined while maintaining the integrity of the utility assets and resources. MS4 Mapping, Various Towns, CT and MA: David developed mobile data collection applications for the update and inventory of several municipalities' stormwater assets. Project staff and stakeholders had real-time access to the spatial data from their phones/tablets and work desktops. Collaboration on data collection reduced the project cost, whereby the municipality was able to collect and update data to the shared centralized project database. David managed the data collection efforts and executed data objective goals.

Meriden Source Water PFAS/PFOA Risk

Assessment, Meriden, CT: Risk determination for drinking water supply wells and drinking water reservoirs was evaluated based on land use activity and operational use. Town GIS parcel information was composited into a geodatabase where land use types were reconciled into a consistent schema. Watershed catchment areas for drinking water supply reservoirs were updated based on the 2017 lidar elevation data to confirm the areas of interest. Intersecting high risk land use that was located within the drinking water supply wells aquafer protection areas and drinking water reservoir watershed catchment areas were isolated for further operational use evaluation. The water authority responsible for performing yearly inspections for the source waters now has an inventory of properties where the risk of PFAS/PFOA contamination is elevated.





Tyler de Ruiter, PE, PTOE

Traffic/Parking

"Transportation is one of the most visible and public facing facets of civil engineering. While at times the public process can be lengthy, it is extremely gratifying to see projects go from concept sketch to shovels in the ground to accommodating motorists, cyclists, and pedestrians. I take pride in knowing that we helped to better the community."

tderuiter@fando.com

617.409.5431

EDUCATION

BS, Civil/Environmental Engineering - 2010, University of Massachusetts at Amherst

MS, Civil/Environmental Engineering - 2012, University of Massachusetts at Amherst

LICENSES & REGISTRATIONS

Professional Engineer MA Professional Traffic Operations Engineer

PROFESSIONAL AFFILIATIONS

Institute of Transportation Engineers American Society of Civil Engineers

EXPERIENCE

11 years Professional Experience

Tyler is a Senior Transportation Engineer working out of Fuss & O'Neill's Boston office. Tyler's background includes the peer review of traffic impact and access reports, development and design of traffic calming studies, development of functional design reports and other transportation studies, preparation of technical design plans, preparation of transportation access and safety evaluations for schools, and assistance with MassDOT Complete Streets Tier I, II, and III.

REPRESENTATIVE PROJECTS:

Traffic Signal and Safety Upgrades, University of Massachusetts, Amherst, MA: As Senior Transportation Engineer, Tyler is responsible for the implementation of traffic signal and safety upgrades at four different locations across the University of Massachusetts-Amherst campus.

District 5 Safety Improvements, MassDOT,

Southeastern, MA: Tyler is responsible for providing general design oversight for streetscape and safety improvements for pedestrians and motorists at several locations throughout MassDOT District 5, including locations along Route 6A on Cape Cod.

Neighborhood Safety and Mobility On-call Traffic Services, Boston, MA: Tyler is responsible for providing traffic operations and design oversight for two roadways in downtown Boston. Work includes a



one-way roadway conversion with contra-flow bike lanes and associated traffic signal adjustments.

Wrong Way Guidance Study, MassDOT, Boston, MA:

Tyler is responsible for providing general oversight with respect to improvements on highway off-ramps to discourage wrong-way movements.

Projects prior to joining Fuss & O'Neill:

Municipal On-Call Traffic Services, Multiple

Communities, MA: Tyler has provided on-call traffic engineering services to communities across Massachusetts. As part of his responsibilities, Tyler completed peer reviews of Traffic Impact and Access Studies, reviewed site plans, evaluated field conditions, performed traffic analyses, and designed geometric and safety improvements.

Route 8 Bus Route Evaluation, MetroWest Regional Transit Authority, Wellesley, MA: As Project Engineer, Tyler examined conditions along a proposed MWRTA bus route through Wellesley from Natick to Newton to provide recommendations/feasibility of bus stop locations. He presented findings at a meeting with Town Officials.

Hardy, Hunnewell, Upham School Consolidation,
Wellesley, MA: As Project Engineer, Tyler performed
a high-level evaluation of 22 intersections and four
scenarios of elementary school consolidation and
redistricting. He was responsible for field reconnaissance
of school procedures, data analysis, simulation (Synchro),
and presentations at several committee and public
hearings

Hunnewell Elementary School Feasibility Study, Wellesley, MA: As Project Engineer, Tyler completed

a feasibility study and Project of Significant Impact reports for the proposed new elementary school in a suburban downtown setting. He was responsible for field observations, data analysis, simulation, and report writing. Hardy Elementary School and Upham Elementary School Feasibility Studies, Wellesley, MA: As Project Engineer, Tyler completed feasibility study reports for two proposed elementary schools in a suburban setting. The project included challenges in site design and traffic operations given an existing oversaturated corridor at Weston Road. He was responsible for field observations, data analysis, simulation, and report writing.

Town-wide Traffic Evaluation, Randolph, MA: As Project Engineer, Tyler developed several short-term, mid-term, and long-term design concepts to promote traffic calming within two neighborhoods. Features of the project included median islands, mini-roundabouts, all-way stops, traffic circles, and traffic signals.

Middle Street at Libbey Industrial Park, Weymouth,

MA: As Project Engineer, Tyler provided engineering guidance and professional review for installation of a proposed right turn lane and relevant traffic signal adjustments to an existing traffic signal.

Traffic Calming Measures, Westwood and Lexington,

MA: As Project Engineer, Tyler implemented traffic calming measures across two municipalities that included speed humps, raised intersections, raised median islands, flush islands, and truck aprons on suburban residential roadways. Key challenges involved adequate placement of devices given roadway grading and driveway location, and design iterations based on public feedback. Tyler was responsible for field reconnaissance, design, and estimates





John Deskavich, PE, ENV SP

Complete Streets Design

"I became a transportation engineer because I always had a fascination with the interconnection of roadways and how they impact the community. I get great satisfaction knowing that I contribute to the design and inspection of roadway improvements that enhances safety and efficiency for the community."

jdeskavich@fando.com

413.333.5470

EDUCATIONBS, Civil Engineering - 2017
Syracuse University

LICENSES & REGISTRATIONS
Professional Engineer MA

EXPERIENCE6 Years Professional Experience

John is a Transportation Engineer in our Boston, MA office. John has experience with roadway and site construction inspection and construction specification development. He is responsible for generating engineering field reports and acts as a main point of contact among the construction team, the design team, and the client. He contributes to the design of roadway and transportation projects and is familiar with MassDOT design standards.

REPRESENTATIVE PROJECTS:

King Street (Route 5) Corridor Improvements,
Northampton, MA: Transportation Engineer for this

MassDOT corridor improvement project. Intersection realignment and intersection coordination at three locations were provided. The design provides an extension of the downtown district and includes Complete Street techniques and an implementation of a road diet, providing room for a separated bike lane that connects to the Northampton Bikeway. LID stormwater techniques were included in the design, such as on-street rain gardens and tree filters. Coordination with stakeholders and community outreach were vital components of this project.

Lyman (Route 33) and Newton Streets Design, Town of South Hadley, MA: Transportation



Engineer for engineering and contract documents for roadway reconstruction critical public infrastructure improvements. A full-depth pavement reclamation was performed on Lyman Street, allowing the re-use of existing pavement for subbase material. To improve safety and aesthetics, an existing asphalt sidewalk was replaced with a 5-foot-wide cement concrete sidewalk along the length of the project area. To improve multimodal capabilities, new bicycle accommodation markings, roadway stripping, and traffic signage were installed. Regarding utilities, a cast iron water main (including service connections up to the Town property line/curb stop) was replaced and the stormwater drainage system was upgraded to accommodate new curbing (i.e., a closed drainage system).

Ashuwillticook Rail Trail Design, Pittsfield, MA:

Transportation Engineer for the conceptual design and final construction plans for the Ashuwillticook Rail Trail extension (1.56-mile extension). The 10-foot-wide trail extension completes the more than 14-mile bike and pedestrian trail from Adams to Pittsfield, making a connection to numerous neighborhoods, shopping, and community resources. Fuss & O'Neill provided the MassDOT-reviewed conceptual, final, and right-of-way design plans. Public outreach and communication with adjacent property owners were imperative to the success of the project. Safety improvements included shaded rest areas, two parking areas with new lighting, signage, and rectangular Rapid Flashing Beacons (RRFBs). The trail is fully ADA compliant and the ADA, fully plumbed comfort station is unique in the Commonwealth.

Adams Street at Whitwell Street Intersection

Design, City of Quincy, MA: Transportation Engineer for transportation improvements associated with the

redevelopment of a major medical facility. Both a signalized approach and a roundabout were analyzed for design. Two design alternatives were created, which focused on vehicular capacity, bicycle/pedestrian accommodation, utility impacts, and landscape enhancements. In addition to renderings, opinions of probable construction cost were developed to aid in the decision. The roundabout was the chosen improvement solution and final designs are currently being prepared.

Rail Trail Planning and Design, Belchertown, MA:

Transportation Engineer for the redevelopment of the former Massachusetts Central Railroad into a paved, recreational, multi-use trail known as the Massachusetts Central Rail Trail. Planning includes route alternatives, conceptual plan preparation, trail cross-sections, and construction cost estimates.

Six Corners Roundabout, Springfield, MA:

Transportation Engineer for the complete redesign of an intersection that was long plagued by delays, high accident rates, and unsafe pedestrian accommodations. The six-legged roundabout was modeled using Torus, then the alignments and roadway layout information were integrated into our AutoCAD Civil3D model of the intersection for the development of final design documents. The roundabout design balanced complex geometry challenges to meet the City's integrated goal of improved traffic circulation, improved safety, and creating a public space connecting the neighborhood. A more efficient traffic flow reduces vehicle delays at the intersection and improves traffic flow through the area. The low speed design of the roundabout reduces overall vehicle speeds in the corridor.





Nicole Fox, PE

Complete Streets Design

"My focus in transportation engineering is to use creative solutions to improve safety and mobility for all modes of travel. I enjoy solving puzzles and working out the best design solutions for challenging situations. I see what we do as a way to serve our communities while fulfilling client needs."

nfox@fando.com 603.222.3480

EDUCATION

BS, Civil Engineering - 1999 University of Florida

LICENSES & REGISTRATIONS

NHDOT LPA Labor Comp Professional Engineer ME Professional Engineer NH Professional Engineer VA Professional Engineer VT

PROFESSIONAL AFFILIATIONS

Women in Transportation (WTS)

EXPERIENCE

25 Years Professional Experience

Nicole is a Senior Project Manager with experience in all phases of transportation design and planning. Her practice includes rail trail design, new location trails, bicycle and pedestrian planning and scoping, as well as sidewalks and on-road bicycle lanes and cycle tracks. She is a founding member of the firm's Active Design Group, which focuses on designing transportation facilities for all users.

Nicole is a skilled listener and excels at fostering open communication between clients, agencies, and other consultants. As a good communicator and team leader, she has excellent project management skills and experience managing municipal and state projects.

REPRESENTATIVE PROJECTS:

Blackstone Bikeway Design, Central Falls, RI:

Nicole served as Project Manager for the Blackstone Bikeway Design project and for a proposed multi-use trail adjacent to the Blackstone River. The Blackstone Bikeway project will redistribute existing pavement to incorporate bike lanes through City streets.

Fuss & O'Neill provided base mapping, preliminary design, and final design. Our team will also perform construction administration services.

BUILD and RAISE Grant Applications, Alternative Access to South Commercial Street, Manchester,

NH: Nicole provided guidance to the roadway connectivity of sidewalks and other project elements during the development of the 2019 and 2020 BUILD Grant applications, and for the 2021 RAISE



Grant application for the City of Manchester. Nicole participated in the original 2019 charrette event.

Pleasant Valley Parkway and Broadway Big Jump Project, Providence, RI: Project Manager for final design, traffic plans, stormwater management plans, and other transportation services for this bicycle and pedestrian improvement project.

Delaware and Hudson Rail Trail Resurfacing,
Southwestern VT: Nicole served as Project Manager
for the development of plans for resurfacing 20 miles
of rail trail. The Delaware and Hudson Rail Trail includes
two segments running from Castleton to Poultney
and West Pawlet to Rupert. The project included
development of typical sections, trail alignment plans,
informational signing, and areas of detailed trail design
in the Village of Poultney.

VT Route 100 Sidewalk Design, Stowe, VT: Nicole served as Project Engineer for the preliminary design of two sections of new sidewalk construction on Lower Main Street and Maple Street (approximately 3,000 linear feet). This project was managed by the Town as part of the VTrans Local Transportation Facilities Program. Sections of the project were classified as both State Highway and a Class I Town Highway.

Sidewalk Replacement Study, Stowe, VT: Nicole served as Project Manager to evaluate approximately 15,000 linear feet of sidewalk throughout the Village of Stowe. The project evaluated existing conditions, future needs, accessibility, and materials needed for the project. The team also recommended prioritized actions and areas to address.

Community Trail, Dover, NH: Nicole is serving as Project Manager for design and construction engineering for Phase 4 of a bicycle/pedestrian trail

along an abandoned railroad corridor connecting to the Transportation Center. The work included improving an existing abandoned railroad truss bridge over the Cocheco River and construction of an underpass at Silver Street. All phases of the project were processed through the NHDOT LPA program.

South Street Improvements, South Hero, VT: As Project Engineer, Nicole was responsible for hydrology and hydraulic calculations, design of stormwater collection, and design of treatment systems to meet Agency of Natural Resources regulations. This project included reconstruction/reclamation of 1.3 miles of local street to provide improved roadway and drainage. The project was locally managed and federally funded through the VTrans Municipal Assistance Bureau (MAB) program.

Loop Road/Cooperative Way Extension and Route
3/106, Town of Pembroke, NH: Nicole served as Lead
Roadway Engineer for construction of a new Town
roadway and the fourth leg of the intersection at US Route
3/State Route 106. Design and construction plans included
roadway, drainage, and stormwater treatment design, as
well as improvements to Route 3 and Route 106 for the
new leg of the signalized intersection.

Brock Street Reconstruction, Rochester, NH: This project included reconstruction of a one-mile-long urban roadway; the replacement of sewer, drainage, and water within the project limits; installation of new granite curbing and bituminous and concrete sidewalks throughout; and the implementation of traffic signal revisions (including new pedestrian phases). Significant project challenges included the coordination of all construction activities with heavy vehicular and pedestrian traffic from an elementary school and a middle school located within the project limits.





Michael P. Frederick

Landscape Architecture / Urban Planning

"I use context, innovation, and form to create ways for people to experience a space in a lasting and deliberate way."

mfrederick@fando.com 860.426.6038

EDUCATION

BS, Landscape Architecture -2015 SUNY College of Environmental Science and Forestry **LICENSES & REGISTRATIONS**

PROFESSIONAL AFFILIATIONS

8 Years Professional Experience

Michael is a landscape designer in the Community
Development Business Line. He works on a variety of urban design and placemaking projects, corporate and educational campus master plans, and athletic facilities. Michael also provides 3D modeling and visualization techniques and creative problem-solving solutions. His ability to think strategically and spatially makes him an invaluable team member and designer.

Michael has gained a pragmatic approach to design that is functional and meaningful. He has experience leading projects from schematic design through construction detailing, bidding, implementation, and post-construction evaluation. His knack for organization, punctuality, and responsiveness underscores his role as an excellent construction contract administrator. He credits his approach to the balance of practicality and creativity to his years of experience in construction administration, achieving the most thorough and successful design.

REPRESENTATIVE PROJECTS:

Shawsheen River Nature-Based Flood Resilience,
Town of Andover, MA: Michael was part of an
interdisciplinary team that targeted areas for land
acquisition and conservation to provide additional
flood storage and help reduce impacts of large
storm events. His role was to help facilitate a public
design workshop detailing recommendations for
programmed park spaces within town acquired lands.
3D visualizations were key in capturing the essence
of how flood mitigation strategies can fit in a dense
neighborhood context and still be of functional
recreational use to a community.

GE Vernova Campus Masterplanning and Construction Documents, Town of Niskayuna,

NY: In the neighboring town to our Schenectady,



NY office, F&O was tasked to provide conceptual site improvement recommendations to an aging corporate campus. Our initial scope has grown from providing 3D model fly throughs and presentation graphics to a full construction document package featuring the inclusion of a new Welcome Center and secure site entry sequence, an expanded entry plaza, and courtyard space to compliment interior renovations. Each proposed space features custom detailed furnishings, sculptural site elements, and refined contemporary design principles. In addition to the conceptual visualizations at the onset of the project, Michael's role is to manage and preserve the design integrity of the initial concept deliverables and to assist in the production and oversight of the construction document package.

Resilient Fair Haven: Adaptation Strategies for the Fair Haven Neighborhood, City of Fair Haven,

ct: One of the most important factors to promoting resilient communities is to provide a range of solutions specific to the physical and social context of the intervention area. This project sought to respond to the community's pleas for flood risk reduction, extreme heat resilience benefits, and community asset enhancement. Michael's role was to help identify adaptation strategies to preserve and complement assets like park land and cultural / civic centers. These strategies were visualized in 3D and compiled into a large format report to help inform grant funding opportunities.

The following projects were completed prior to joining Fuss & O'Neill:

Downtown Streetscape and Riverfront Promenade

Design Development Plan, Village of Port Chester,

NY: The Village of Port Chester's ambitious vision is to transform their Downtown's identity from an auto-oriented and fragmented patchwork of disconnected uses into a thriving, pedestrian-focused, destination that is rooted in the visitors' experience when out of the car. This vision seeks a Downtown that celebrates and represents its history, culture, diversity, and geography through its built environment. To accomplish this design feat, Michael helped facilitate a multi-day workshop that focused on streetscape design, pedestrian connections from multi-model transportation hubs to riverfront and downtown amenities, and expanded public access to riverfront promenade enhancements. His role centered on graphic visualizations and 3D model flythroughs.

One Monument Square Redevelopment and **Riverfront Esplanade Extension Urban Planning and** Landscape Architecture, City of Troy, NY: This project began with a multi-day design workshop centered around the development of a vacant site in the heart of the downtown core. Multiple attempts to redevelop the site in the past have failed for reasons that include: politics, economics, and strong public protest. The common theme of the failed attempts was that the proposals were developer driven, where the developer proposes and the public reacts. This process failed to strike the right balance between civic space and viable development, leaving the people of Troy feeling unheard, left out, and misled. As a consultant to the City of Troy, Michael worked with a team of urban designers and architects to strike the required balance of programming the public wants and viable development. His role included design, facilitation of public outreach and presentations, and 3D graphic visualizations.





John Guzze, PE

Complete Streets Design

"Projects we have completed demonstrate what we know; future projects decide what we will learn. Soaking in all the knowledge from coworkers who can make any project become a reality is something I look forward to each week."

jguzze@fando.com

860.783.4696

EDUCATION

BS, Civil Engineering - 2012 University of Massachusetts at Amherst MS, Transportation Engineering -2013 University of Massachusetts at Amherst

LICENSES & REGISTRATIONS

Professional Engineer CT

PROFESSIONAL AFFILIATIONS Inst Transportation Engineers CT Institute of Trans Eng

EXPERIENCE

10 years Professional Experience

John is a Project Manager in Fuss & O'Neill's Transportation Department in Manchester, Connecticut. John has been leading roadway, streetscape, and safety improvements projects throughout Connecticut for several years. Drawing on his practical background designing parking solutions, bikeway facilities, intersection improvements, and streetscape enhancements, John leads and creates practical and constructable solutions for Connecticut municipalities. John works closely with his clients, listening to their concerns and making sure he understands their needs - both current and future needs. He then leads teams to design context-sensitive improvements that create safer passageways for all roadway users.

REPRESENTATIVE PROJECTS:

Wall Street Corridor Improvements, Norwalk,

CT: Project Manager for preliminary and final design, traffic operations and safety evaluation, and coordination for roadway reconstruction on the Wall Street corridor. Community charrettes were conducted to gather feedback from stakeholders to create a concept and final design for the project, while keeping the community informed of project progress. Improvements included streetscape enhancements, safe bicycle lanes, pedestrian accessibility, and overall connectivity to local business, event spaces, and downtown areas.

Lower Summer Street CCGP Design, Stamford,

CT: Project Manager for roadway improvements on lower Summer Street to expand the sidewalk



and include a raised pedestrian promenade.

Tasks include topographic survey, roadway design components, public outreach and permitting. Proposed improvements will provide a safer and more pedestrian friendly corridor which will in turn boost economic growth for local businesses and create connectivity to a local park, the downtown area, and a CTtransit hub. The raised intersection will provide a highly visible and accessible crossing area for pedestrians, as well as serve as a traffic calming measure. This project was funded through CTDOT's Community Connectivity Grant Program (CCGP). **West Main Street Community Connectivity Grant** Program Assistance, New Britain, CT: Project Manager for the preparation of the Community Connectivity Grant (CCGP) project application with proposed improvements that will provide safer pedestrian connectivity, increased accessibility, enrich the surrounding neighborhoods, create a positive and equitable environment, and provide improved

Myrtle Street LOTCIP Application Assistance,
New Britain, CT: Project Manager to assist with the
application for LOTCIP Funding for Myrtle Street
Streetscape Improvements. Implementation of the
proposed LOTCIP application will improve overall
multimodal safety by providing bike lanes, sidewalks,
ADA compliant facilities, and improved public
transportation circulation.

operations for vehicular travel.

Traffic Control Signal Replacement, CTDOT, District 3, CT: Senior Transportation Engineer for State Project No. 173-486/487. Under Fuss & O'Neill's Task-Based Traffic and Safety Engineering Services contract, 12 full equipment replacement traffic signals were

selected for equipment replacement. The project included the upgrade of the existing infrastructure to the latest standards (e.g., span poles/mast arms, signal head placement, upgraded signage, and vehicle detection). Pedestrian control features upgraded included accessible pedestrian signals (APS) with pushbuttons and countdown signal heads. The project included construction/reconstruction of curb ramps, blended transitions, sidewalk extensions, landing areas, detectable warning surfaces, and realignment of skewed crosswalk pavement markings. Capacity analysis using Synchro software was conducted at each of the locations to determine any recommended changes to the signal phasing and/or timings, including clearance intervals and pedestrian timings. Several of the intersections are located within existing computerized traffic signal systems, which also required updated progression analysis.

Horizontal Curve Project, CTDOT, District 1, CT: Senior Transportation Engineer for State Project No. 171-440. Under Fuss & O'Neill's Task-Based Traffic and Safety Engineering Services contract, curve warning signing was reviewed on approximately 1,750 curves throughout 36 towns in the central part of the state. Each curve was reviewed to determine if the existing signing was appropriate and should be removed or replaced with enhanced signing. Field review was performed for each curve, which included reviewing the existing conditions using a ball-bank indicator and GIS mapping to determine appropriate advisory speeds. Data was uploaded to the GIS database server and visualized in a customized project dashboard where information was QC'd and adopted to the design environment.





Kevin McGarry, PE, MCPPO

Stormwater

"I feel fortunate to work on large, complex multidisciplinary development and redevelopment projects that enrich our neighborhoods and add value to our communities."

kmcgarry@fando.com

617.379.5883

EDUCATIONBS, Civil Engineering - 2010
University of Connecticut

LICENSES & REGISTRATIONSProfessional Engineer MA

EXPERIENCE14 years Professional Experience

Kevin is a Project Manager working out of Fuss & O'Neill's Quincy, Massachusetts office. He has worked on a wide range of complex, multidisciplinary projects, including large-scale land development, urban redevelopment, stormwater management, infrastructure improvement, solid waste management, and flood control projects. Through this experience, he has gained expertise in site layout, grading, stormwater management, utilities, erosion and sediment control, and Low Impact Development (LID) design as well as permitting at the local, state, and federal levels.

REPRESENTATIVE PROJECTS:

Lexington Fire Headquarters, Lexington, MA:

Project manager for the design of the Lexington Fire Station. The improvements included the demolition of an existing fire station and construction of a new fire headquarters. The project utilized Low Impact Development features such as bio-retention basins and porous pavement to improve the quality of stormwater leaving the site prior to discharging to the adjacent wetlands. Response efficiency and safety was greatly improved through the design of a new traffic signal and implementation of a pre-emption detection system.

West Natick Fire Station, Natick, MA: Project manager for the schematic design of a new fire station in Natick. On-site circulation and site access



will be improved through the addition of a site driveway and emergency signal directly onto a Route 9 frontage road. Additional improvements include new parking lots, landscaping, driveways, stormwater infrastructure, and site utilities.

Needham Recycling and Transfer Station (RTS)
Bin Wall and Stormwater Projects, Needham, MA:

Project manager for the expansion of an existing stormwater basin and construction of a new forebay at the base of the existing landfill as well as a series of forebays and a stormwater basin for the compost area. Fuss & O'Neill worked closely with the Town to secure the necessary wetlands permits for the proposed project. Assisted with the preparation of bid documents for the construction of a material storage bin layout area constructed with precast concrete blocks.

Public Safety Facility, Charlton, MA: Project manager for the design of a new combined public safety facility in Charlton. Working closely with the Town and the design team, the site was carefully laid out and graded in close proximity to existing wetland resource areas. A robust erosion control plan and stormwater management system was designed to protect the wetlands during and after construction.

Lexington Police Station Headquarters Design,
Lexington, MA: Project manager for the design of
the Lexington Police Station. The improvements
included the reconstruction of a new police station.
The new station will be located in the same location of
the existing station and has been designed to mimic
the historic presence of the existing building. The
proposed project will be designed to mimic historic
pre-development stormwater conditions.

Auburn Public Safety Feasibility Study, Auburn,

MA: Project manager for the feasibility study and site evaluations for the Auburn Fire and Police Departments. Working closely with the Town and the design team, Fuss & O'Neill evaluated multiple sites for redevelopment. Utilizing publicly available information, we were able to efficiently determine if potential sites were worth further evaluation.

Police Station and Municipal Campus Feasibility
Study, Shrewsbury, MA: Civil Engineering services to
support a feasibility study associated with the planning
and construction of and modifications to the Town's
Municipal Campus (including the Police Station, Town
Hall, and Senior Center) located at 100 Maple Avenue.
Services include, Phase I ESA, HazMat Inspection,
wetlands assessment, and preliminary geotechnical
investigations, and a schematic site plan.

Davenport Boatyard & Mixed-Use Redevelopment, Stamford, CT: Lead designer for the 14 acre mixed

use development along the West Branch of Stamford Harbor. Project consisted of a new state-of-the-art boatyard facility and marina, a 4 story residential building constructed over a two level parking garage, and the redevelopment of an adjacent office and retail site. The boatyard also included a steel sheet pile bulkhead, travel lift well for hauling boats, and a 28 slip marina. In addition to local permits, the site also required coastal and environmental permits from CTDEEP and USACE.





Michael Nelson, PE

Utilities

"Working for a public works department had a lasting effect on my career. Water and sewer are utilities that are essential to human life. You quickly learn that the people who care for these systems are the backbone of the community, and you want to be a part of that with them."

mnelson@fando.com

617.379.5544

EDUCATION

BS, Civil / Environmental Engineering - 2006 University of Massachusetts Amherst MS, Civil Engineering - 2010 Northeastern University

LICENSES & REGISTRATIONS

Professional Engineer MA Professional Engineer NY

PROFESSIONAL AFFILIATIONS

MA Water Works Assoc Water Environment Federation

EXPERIENCE

18 years Professional Experience

Mike is an Associate in our Water and Natural Resources Business Line. He is an experienced client manager in the civil and environmental engineering fields, specializing in the development of plans and specifications for municipal water, sewer, and storm drainage infrastructure projects. Mike leads our water infrastructure practice in our Boston office which has doubled in the last two years. Projects range from lead and copper compliance, where our clients have received over \$1.8 million in 100% grant funding in 2023 to condition assessment where we are oversee the complex dewatering and removal of 2,000 tons of sediment from a tidal culvert.

REPRESENTATIVE PROJECTS:

Longmeadow Water and Sewer Utility Renewal,
Town of Longmeadow, MA: The Town of
Longmeadow, MA engaged Fuss & O'Neill for a
\$7 million roadway redesign to address a major
bottleneck and safety deficiencies along Route 5
and connecting roadways in the center of Town. The
Town selected Fuss & O'Neill to incorporate utility
renewal into the TIP project including 1.5 miles of
water main up to 16" in diameter in major roadways
and the assessment of 1.2 miles of sewers for
trenchless rehabilitation. Approximately 10,000 feet
of sewers were CCTV inspected including 35 manhole
inspections. The resulting outcome of the project will
be a fully renewed utility system underneath the full
project limits of the redesigned roadways.



MPDES Compliance, Town of Monson, MA: Project Manager for the reviewal of Monson's new EPA Region 1 NPDES permit for newly promulgated co-permittee regulations which placed new climate vulnerability action plans and sewer system evaluations onto the local utility. Fuss & O'Neill provided a plan and timeline to achieve compliance activities during the permit term.

DHCD-Gloucester Housing Flood Resilience, Gloucester Housing Authority, Gloucester, MA:

Fuss & O'Neill provided engineering consulting services to the Department of Housing & Community Development to assess climate hazards at 14-acre family housing development consisting of 160 housing units. We evaluated the site for current and future flood conditions, sewer back-ups, stormwater damage to buildings, and provided recommendations for improvements to mitigate these threats.

Water System Replacement Design Services for the Springfield "X" Project, Springfield, MA:

Mike is Project Manager to advance preliminary design concepts within the project area for water system improvements. We have produced final bid documents for the \$3.5 million water main replacement project to proceed the roadway project. This assessment includes approximately 7,245 LF of water main of varying sizes and age, along with the associated valves and hydrants. Fuss & O'Neill is designing the "X" project under contract with the City of Springfield, with the project being constructed by MassDOT under the MassDOT TIP program.

Dalton Division Road Sewer Extension, Dalton,

MA: Fuss & O'Neill provided professional engineering services for the design of a new sewer on Dalton

Division Road. The intent of this project is to evaluate the feasibility of a sewer extension from an existing sewer on Scalise Drive approximately 2,560-ft north on Dalton Division Road to approximately house number 312. If feasible, the project will also include design of bid documents, permitting, geotechnical exploration, and coordination with Pittsfield utilities.

Farmington 11 and Sisson Avenue Water Main, MDC, Hartford, CT: Senior Water Resources Engineer for design of an urban utility project consisting of a water main replacement (20-inch mains and replacement with a 24-inch main) and rehabilitation of existing brick and AC sanitary sewers. Total pipeline footage was 8,000 linear feet. The project was located in downtown Hartford, including Farmington, Sisson and Capital Avenues, as well as the I-84 downtown interchange. This project was coordinated with the City

Farmington Sewershed SSES Follow-up, Town of

of Hartford streetscape project.

Avon, CT: Senior Water Resources Engineer providing project support for the ongoing implementation of improvements that were recommended in the Facilities Plan and the Phase I Infiltration/Inflow Analysis study of the Farmington River Sewershed area previously prepared by Fuss & O'Neill. This project includes manhole inspections, smoke testing, flow dilution, CCTV, sewer rehabilitation, and capacity analysis.





Katherine O'Shea, EIT

Traffic/Parking

"Well-designed transportation infrastructure has the power to transform communities and improve the lives of those who live there. The best part of my job is helping people understand how their roadways, sidewalks, and transit systems can better serve them every day."

koshea@fando.com

617.379.5885

EDUCATIONBS, Civil Engineering - 2020
University of Connecticut

LICENSES & REGISTRATIONSEngineer In Training MA

PROFESSIONAL AFFILIATIONSWomen in Transportation (WTS)

EXPERIENCE3 years Professional Experience

Katherine is a Transportation Engineer in the Boston, Massachusetts office with Fuss & O'Neill's Transportation Business Line. Katherine has worked on a variety of projects where she has developed her range of experience in signal design, traffic impact analyses, feasibility and planning studies, transit planning studies, roadway designs, traffic calming and safety projects and public outreach opportunities. Katherine has worked with a variety of municipalities and is familiar with state agencies such as MassDOT, CTDOT, and VTrans and their procedures. Software experience includes SYNCHRO, Sidra, Vissim modeling softwares, and AutoCAD.

REPRESENTATIVE PROJECTS:

Intersection Improvements on Route 28 at Spring
Street and Harrison Boulevard, MassDOT, Avon,

MA: Traffic Engineer for MassDOT pre-25% design for two closely spaced intersections with defined safety issues. The work included a road safety audit, concept development, early environmental impact assessment, and alternatives analysis. Coordinated signals were selected as the preferred alternative and progressed to 25% design.

West Main Street Corridor Study, NVCOG,

Waterbury, CT: Transportation Engineer for corridor study along West Main Street to address safety and traffic flow concerns. The goal of the study was to identify solutions that will provide improved pedestrian, bicycle, and transit-user accessibility.



The Fuss & O'Neill team led meetings, developed presentation materials, and set up correspondence/ communication tools for public engagement of the community through a project website, informational graphics, social media outreach and online surveys. Coordination with Connecticut Department of Transportation (CTDOT) was necessary through active participation in a Project Advisory Committee.

Route 32 Corridor Study, New London, CT:

Transportation Engineer for a corridor study of Route 32 through New London, which enables vehicles to make high-speed connections between I-95 and I-395. The project team used the findings of the community engagement and existing conditions assessment to develop a concept plan to redesign the corridor that included traffic-calming elements designed to slow vehicle speeds, as well as off-street shared-use paths to accommodate pedestrians and cyclists.

Ricciuti Drive at Willard Street Intersection
Improvements, Quincy, MA: Transportation Engineer
for alternatives analysis with a options of roundabout
configurations at the intersection of Ricciuti Drive
and Willard Street in Quincy, Massachusetts. A signal
design was determined to be the best alternative to
improve conditions to reduce crashes, to improve
vehicular flow, and to improve pedestrian and bicycle
facilities. The project is now moving into design.

Intersection Improvements at Adams Street at
Whitwell Street, City of Quincy, MA: Traffic Engineer
for alternatives analysis and roundabout preliminary
design to accommodate increased traffic due to a
nearby housing redevelopment. The proposed design
includes a titled plane roundabout cross slope and
asymmetrical vertical approach profile to account

for the intersection topography. Civil 3D was used to evaluate challenging approach grades, drainage patterns and minimize impacts to private properties.

East Side Traffic Study, I-195 Redevelopment

District, Providence, RI: Traffic Engineer for the traffic impact study that assessed the future impact of six urban infill developments in Providence. The study also explored the feasibility of intersection redesign to address existing pedestrian safety deficiencies and

improve pedestrian connectivity.

Providence Bike Project Final Design, Providence, RI: As a traffic engineer, Katherine assessed the feasibility of various possible bicycle and pedestrian safety improvements at the intersection of Pleasant Valley Parkway and Valley Street. Recommended improvements included changes to existing pedestrian signal timing and phasing, relocated crosswalks, and curb ramps. Thomas E. Burgin Parkway Bus Garage, MBTA, Quincy, MA: Fuss & O'Neill worked as a subconsultant to STV, Inc. to complete semi-final and final signal design for a new signalized driveway at the proposed MBTA electric bus maintenance facility on Thomas E. Burgin Parkway in Quincy. The proposed design included a custom-designed 70-foot mast arm and foundation, as well as foundation design for a relocated overhead sign. The proposed intersection location is adjacent to a coordinated network of three signals, which were re-timed as part of the project to better accommodate anticipated future traffic volumes. Additional upgrades included implementation of leading pedestrian intervals at adjacent signals that experience high-volume pedestrian crossings. We provided bid services and are providing ongoing support as construction of the project continues.





Katherine Patch, PE

Complete Streets Design

"In my eyes, being an engineer means improving the lives of people around us by innovative problem solving. It's a continuous reward to deliver projects that have a chance to positively impact someone's everyday life. I come to work each and every day eager to be better and more efficient than the day before in the interest of creating or recreating the fabric of a community."

kpatch@fando.com

617.379.5884

EDUCATION

BS, Civil Engineering - 2015 **University of Connecticut**

LICENSES & REGISTRATIONS

PROFESSIONAL AFFILIATIONS Inst Transportation Engineers Professional Engineer MA

EXPERIENCE

8 Years Professional Experience

Katherine is a Senior Transportation Engineer with Fuss & O'Neill's Transportation Business Line in the Quincy, Massachusetts office. Katherine joined the group during the winter of 2016 as a graduate from the University of Connecticut with a BS in Civil Engineering. In addition to her energy and positive attitude, she brings a strong background in roadway design, traffic analysis, and stormwater design to the team.

Katherine has a passion for complete streets design due to its inclusive nature. Furthermore, her designs are mindful of resilience strategies and economic development potential. She has experience with New England state departments of transportation, which has given her a thorough understanding of their procedures and regulations

REPRESENTATIVE PROJECTS:

Downtown Transit-Oriented Development (TOD) and Revitalization Workshop, Bridgewater, MA: Public Engagement Facilitator for the Town's "Vision to Reality" project; a multidisciplinary downtown revitalization and TOD redevelopment initiative. Fuss & O'Neill designed and facilitated a public workshop for over 250 stakeholders and residents to expand community understanding and gather public feedback. The project will improve connectivity between the downtown and surrounding neighborhoods, preserve the community's historic character, revitalize underutilized properties, improve transit facilities, foster new residential development, and catalyze economic growth by attracting new start-ups while retaining existing businesses.



Pawtucket Transit-oriented District

Improvements, Pawtucket, RI: Transportation
Engineer for improvements along Pine Street in a
Transit-oriented Development (TOD) District. The
design for the Pine Street corridor within Pawtucket's
TOD Conant Thread District included roadway lane
diets to provide a shared multi-use path to increase
bikeability and walkability to the new train station at
the terminus of Pine Street. This project also included
green infrastructure to address stormwater.

Mattapoisett Neck Road Resiliency Project,
Town of Mattapoisett, MA: Transportation
Engineer for a 2021 Coastal Zone Management
Coastal Resiliency Grant. This project is designed to
examine future sea level rise and storm surge impacts.
The project includes analysis and development of
conceptual alternatives for the low-lying roadway
and culvert with an emphasis on nature-based living
shoreline solutions.

Coastal Roadway Design, Third Beach Road,
Middletown, RI: Transportation Engineer for a design
to raise a coastal roadway to prepare for sea level rise.
This project included responding to comments made
by the abutting property owners and U.S. Fish and
Wildlife Services, redesigning a gravel parking lot to
incorporate a bioswale for filtration to protect the salt
water marshes, as well as a full construction estimate
and bid documents.

Roadway and Highway Engineering for Herring
River Tidal Restoration Project, Wellfleet, MA:
Project Engineer responsible for assisting the senior
design team with roadway design and drafting
highway plans. The scope of this project included
replacing a portion of the Chequessett Neck Road

causeway with 167-foot-long bridge using low-impact design practices to improve treatment of stormwater flowing onto the causeway. This design incorporated recreational fishing platforms and removable flow control panels.

Chappaquiddick Island Ferry Vulnerability
Adaptation, Edgartown, MA: Transportation
Engineer and Assistant Project Manager on a project
focused on potential approaches to raise and
fortify the existing natural and built environment
surrounding the Chappaquiddick Island ferry landings.
This project includes a feasibility evaluation of the
ferry infrastructure as well as roadways and buildings
to determine specific conditions and requirements
to design and implement the respective proposed
elements. This project is centered around an the
commercially dense downtown area that is rich
is historical and well as cultural significance to be
included in the feasibility assessment.

Waterbury, CT: Transportation Engineer for a corridor study along West Main Street to address safety and traffic flow concerns. The goal of the study was to identify solutions that will provide improved pedestrian, bicycle, and transit-user accessibility.

The Fuss & O'Neill team led meetings, developed presentation materials, and set up correspondence/ communication tools for community engagement through a project website, informational graphics, social media outreach, and online surveys.

Coordination with the CTDOT was necessary through active participation in a Project Advisory Committee.





Stephen Savaria, PE, PTOE

Traffic/Parking

"Since the pyramids, our built environment has been as much the result of political and financial imperatives as scientific and technological innovation. I believe as design professionals our task is to inform the process as much as possible with consideration of societal benefit, public safety, and our legacy to future generations."

ssavaria@fando.com

413.333.5478

EDUCATION

BS, Civil Engineering - 1979 Northeastern University

LICENSES & REGISTRATIONS

Professional Engineer MA Professional Traffic Operations Engineer

PROFESSIONAL AFFILIATIONS

Berkshire County Hwy Super Assoc

EXPERIENCE

44 years Professional Experience

Steve is a Senior Project Manager in the Springfield, Massachusetts office and has served in responsible charge for all aspects of the planning, permitting, and design of transportation construction projects throughout New England. He has extensive experience in the analysis, design, and specification of intersection geometrics, traffic signal system operation and equipment, signage and pavement markings, pedestrian facilities and accessibility compliance, and methods, measures, and techniques for the alleviation of congestion and the promotion of traffic safety. Steve is an expert in the assessment of the transportation characteristics, requirements and impacts of private commercial, institutional, and residential development projects.

REPRESENTATIVE PROJECTS:

The "X" Corridor Project, Springfield, MA:

Steve is serving as the Project Manager for the "X"

Corridor project in Springfield. Rated as the 16th most dangerous intersection in the State, the City of Springfield sought solutions to address public safety issues, decrease the number of crashes, ease traffic congestion, and create an enhanced "sense of place" by making the area a more walkable environment.

The improvements included widening parts of Sumner Avenue to five lanes, adding bike lanes, introducing left turn lanes, installing four new traffic signals, and creating mini-roundabouts at two intersections to create a more aesthetically pleasing pedestrian environment while balancing the needs of motor vehicles.



Main Street Reconstruction, Great Barrington, MA:

Project manager for the reconstruction of Main Street from Cottage Street to Taconic Avenue. Planning and design of 1/2 mile downtown corridor improvements. Work included pavement milling and overlay and full depth reconstruction. Sidewalks reconstructed, drainage improved and traffic signals coordinated. Street lighting and landscaping included. Shared accommodations for all users have been provided in accordance with applicable guidelines.

Springfield Street/Faculty Street Reconstruction,

Wilbraham, MA: Project manager for the preparation of a Functional Design Study and construction plans and specifications for the reconstruction of approximately 3,050 meters (10,000 feet) of town streets. Reconstruction/improvement plans for two intersections, including new traffic signal control equipment, left turn lanes, and intersection realignment to improve sight distance. Install sidewalk 2.3 kilometers along the interior of a looped road system for pedestrian enjoyment and safety adjacent to a school and athletic fields.

Route 131 Reconstruction, Southbridge, MA:

Project Manager for the Massachusetts Department of Transportation project to reconstruct approximately 1.9 miles of Route 131 along Main Street and East Main Street. The proposed improvements will take place mostly within the existing roadway with minor widening at intersections for auxiliary lanes. Project features included: installation or upgrading of traffic control signals at five intersections, replacement of the existing storm sewer, replacement of existing sidewalks, new sidewalks, closed loop traffic control system with spread spectrum radio interconnect.

Boston Road Corridor Improvements, Springfield,

MA: Project Manager for the planning and engineering for the design of roadway and traffic control improvements along Boston Post Road from State Street easterly to the intersection of Pasco Road (Route 20). This roadway required improvements due to sub-standard roadway widths, safety concerns, traffic congestion, lack of pedestrian accessibility, and unacceptable levels of service. Work included data gathering, field survey, solicitation of public input, roadway design, drainage design, traffic control signal design, estimation of costs and advice during construction.

Six Corners Roundabout, Springfield, MA:

Steve served as Project Manager for the City of Springfield for the construction phase of intersection improvements in the Six Corners neighborhood. Fuss & O'Neill worked with the City to develop a series of potential roundabout design options for the six-legged intersection, which was plagued with long delays, high crash rates, and unsafe pedestrian accommodations. The design balanced complex geometry challenges to meet the City's integrated goal of improved traffic circulation, improved safety, and creating a public space connecting the neighborhood.

Plainfield Street Pedestrian Safety, Springfield, MA:

Project Manager for the study to assess safety and operational conditions in the vicinity of the crossing and evaluate potential improvement measures. The pedestrian crossing is highly utilized that crosses four lanes of traffic and lacks traffic control devices.





Kevin Sullivan, PE, LEED AP

Lighting

"I have always liked solving problems and building things. I find it rewarding to help someone solve a problem that they are dealing with, and it is great to be able to drive by a project and say I helped build that."

ksullivan@fando.com

617.379.5886

EDUCATION

BS, Electrical Engineering - 1994 Northeastern University

LICENSES & REGISTRATIONS

Professional Engineer MA, CT, ME, MD, NH, NJ, NY, PA, RI, VT, MI LEED-AP

EXPERIENCE

29 years Professional Experience

Kevin is a Vice President and Regional Office Manager in our Boston office. Throughout his career he has managed a wide variety of successful multidiscipline projects. His specific area of expertise is electrical engineering, where he has acquired a considerable amount of experience, including extensive field investigation, conceptual design, detailed engineering and design, specifications, cost estimating, feasibility reports, master plans, and construction administration/supervision. Kevin has a strong interest and special expertise in energy conservation and the application of alternative energy systems for a variety of projects.

REPRESENTATIVE PROJECTS:

Site Improvements, VA Jamaica Plain, Jamaica

Plain, MA: Project Electrical Engineer responsible for the design of the energy efficient LED lighting system for over 3 acres of parking. The final design provided far better luminance levels and reduced the total wattage of the lighting system from over 6kW to under 2kW. A feasibility report was completed prior to the design establishing energy savings and return on investment. Another aspect of this project was the transitioning of an overhead Verizon and Comcast pole line to underground. Extensive coordination was required between the VA, Verizon and Comcast.

Robshaw Visitor's Center Solar Canopies,
University of Massachusetts, Amherst, MA:

Project Manager for Visitor's Center Solar Canopies



generating 64 kW of power. Responsible for design of the distribution system to interface with the University distribution system. Project also included LED lighting and car charges for each canopy.

Acushnet LNG Facility Combined Heat and Power (CHP) Feasibility Study, NSTAR Gas, Acushnet,

MA: Lead electrical engineer for this feasibility study, which evaluated using boil off gas from the Acushnet LNG facility's LNG storage tank to fuel a CHP system. The study revealed more than adequate boil-off gas to provide power the facility. The study also indicated that there was adequate gas to provide approximately 1MW of power to the grid. The economics proved to be favorable and the next steps will involve a CHP system preliminary design.

Combined Heat and Power Feasibility Studies:

Electrical engineering lead for assessing the feasibility of a combined heat and power (CHP) installation at the City's two wastewater treatment plants – Housatonic and Beaver Brook. A CHP system would be fueled by the digester gas produced during the anaerobic digestion process and supplemented with natural gas. The economics for the larger WWTP (Housatonic) were favorable, while that for Beaver Brook were not as attractive.

Biomass Heating System, Ponaganset Middle and High Schools, North Scituate, RI: As part of a \$46 million dollar project to build a new middle school and renovate an existing high school, Fuss & O'Neill worked with ESCO and ConEd to design and install the state's first biomass heating systems to go into a public building. The biomass heating system consisted of a 6.4MBtu woodchip-fueled boiler for the High School and a 3.2 MBtu woodchip-fueled boiler at the Middle

School.

Combined Heat and Power Feasibility Studies,

Fairfield, CT: Electrical engineering lead for assessing the feasibility of a combined heat and power (CHP) installation at the Town's wastewater treatment plant. A CHP system would be fueled by the digester gas produced during the anaerobic digestion process and supplemented with natural gas. The economics for a CHP system were favorable and the Town is moving forward with the next phase.

Biomass Heating System, Ponaganset Middle and High Schools, North Scituate, RI: As part of a \$46 million dollar project to build a new middle school and renovate an existing high school, Fuss & O'Neill worked with ESCO and ConEd to design and install the state's first biomass heating systems to go into a public building. The biomass heating system consisted of a 6.4MBtu woodchip-fueled boiler for the High School and a 3.2 MBtu woodchip-fueled boiler at the Middle School.

Geothermal Systems, Bradley Air National Guard Base, East Granby, CT: The project included design and installation of a new closed-loop geothermal heating and cooling HVAC system for the 18,200 square foot Squadron Operations Building. Based on thermal conductivity monitoring of a test well installed at the site, a seven by three circuit configuration of 390-foot deep wells was selected to match the heating and cooling load calculations for the building. The test well is incorporated into the design and provides dedicated service to one of the water-source heat pumps. The new system includes a total of eleven water-source heat pumps.





Matthew Taylor, PE

Complete Streets Design

"It gives me great satisfaction to drive through my community and know that I've contributed to making the roadways and intersections safer and more efficient."

mtaylor@fando.com

413.355.5385

EDUCATION

BS, Civil Engineering - 2003 University of Massachusetts at Amherst

LICENSES & REGISTRATIONS

Professional Engineer NH

EXPERIENCE

20 years Professional Experience

Matt is a Senior Transportation Engineer in our Transportation Business Line out of our Springfield, Massachusetts office. He is responsible for geometric design of roadways, roundabouts, and stormwater and drainage design. He also has experience with horizontal and vertical design and construction inspection for roadways. Matt is well versed in MassDOT and New Hampshire DOT design standards and is experienced in MicroStation, InRoads, and Civil 3D.

REPRESENTATIVE PROJECTS:

Berkshire Medical Center Area Improvements,

Pittsfield, MA: Lead Designer of the roadway improvements for a section of the primary North/ South arterial (U.S. Route 7) through Berkshire County. The project follows Complete Streets Policy encompassing bike lanes, sidewalk and shared use paths along with pavement, drainage, safety, retaining walls and roundabout layout.

University Drive Corridor Improvements,
University of Massachusetts, Amherst, MA: Lead
Designer of the corridor improvements on University
Drive. The project design included road diet, buffered
bike lanes, shared-use paths, pavement, drainage,
safety improvements, and a mini-roundabout.

Douglas Street Reconstruction, Uxbridge, MA:



Lead Designer for the roadway improvements for the primary connecting road to Uxbridge Center and Route 146. The design included a bidirectional bike track, sidewalk replacement and safety improvements.

Bungalow Street Engineering Design, Southwick,

MA: Project Manager and Lead Designer for the roadway improvements on a local road through a densely populated area. The design includes pavement, watermain replacement, drainage improvements.

Construction Services for Completion,

Northampton, MA: Project Manager and Lead Designer for the roadway & infrastructure improvements on Higgins Way. The design includes pavement, erosion control, and drainage improvements.

Gardner Elementary School, Jones Whitsett
Architects, Gardner, MA: Lead Designer of roadway safety improvements for the construction of an elementary school. The project included the design of parking lots, access roads, retaining walls, sidewalks, and safety improvements to the existing roadways adjacent to the project.

The "X" Corridor Project, Springfield, MA:

Transportation Engineer on the "X" Corridor project in Springfield. Rated as the 16th most dangerous intersection in the State, the City of Springfield sought solutions to address public safety issues, decrease the number of accidents, ease traffic congestion, and create an enhanced "sense of place" by making the area a more walkable environment. The improvements included widening parts of Sumner Avenue to five lanes, adding bike lanes, introducing left turn lanes, installing four new traffic signals,

and creating mini-roundabouts at two intersections to create a more aesthetically pleasing pedestrian environment while balancing the needs of motor vehicles.

Bruce Freeman Rail Trail Design, Sudbury, MA:

Lead Designer for the design of a 4.6-mile multi-use trail from the trail intersection with the Massachusetts Central Rail Trail near Union Ave to the Sudbury/ Concord Town line. This project will enhance the pedestrian/bicycle movement in the project area and provide alternative travel options for commuters and recreational riders. Much of the rail corridor is adjacent to wetlands, streams, vernal pools, wildlife habitat and other undisturbed natural areas. Two of the streams have pedestrian bridges that require repair/ replacement.

John Fitch Highway Preliminary Design, Fitchburg,

MA: Transportation Engineer for the preliminary design of roadway improvements to John Fitch Highway in Fitchburg. The project includes the preliminary design of multi-modal transportation and drainage improvements to John Fitch Highway from just north of the Bemis Road/Summer Street intersection to just south of the Lunenburg Street intersection. A two-way left turn lane was removed to accommodate green infrastructure and pedestrian/ bicycle accommodations. The design included accommodations for pedestrians and bicycles to the extent that matched context and use of facility. The preliminary design was funded by an MVP Action Grant.





Chelsea Zakas, AICP, CC-P

Public Outreach and Engagement

"My passion lies at the intersection of environmental health, climate mitigation and adaptation. I am here to help communities achieve their goal of becoming more climate resilient and sustainable, through meaningful and equitable community and stakeholder engagement."

czakas@fando.com

860.783.4671

EDUCATION

BA, Geography - 2015 Georgia State University

MA, City and Regional Planning - 2020 Georgia Institute of Technology

LICENSES & REGISTRATIONS

AICP

Certified Climate Change Professional

PROFESSIONAL AFFILIATIONS

American Planning Association Assoc Climate Change Officers

EXPERIENCE

5 Years Professional Experience

Chelsea is an Environmental Planner in Fuss & O'Neill's Water & Natural Resources Business Line. In her role, Chelsea provides support to a variety of projects through research and technical writing, facilitating community engagement, and using GIS to effectively visualize data.

Chelsea's background in municipal planning gives her experience working and communicating with a variety of stakeholders. She has served as a liaison to multiple community boards and committees, and has led the update to a City-wide Open Space and Recreation Plan.

REPRESENTATIVE PROJECTS:

and Revitalization Workshop, Bridgewater, MA:
Public Engagement Facilitator for the Town's "Vision to Reality" project; a multidisciplinary downtown revitalization and TOD redevelopment initiative. Fuss & O'Neill designed and facilitated a public workshop for over 250 stakeholders and residents to expand community understanding and gather public feedback. The project will improve connectivity between the downtown and surrounding neighborhoods, preserve the community's historic character, revitalize underutilized properties, improve transit facilities, foster new residential development, and catalyze economic growth by attracting new start-ups while retaining existing businesses.



Main Street Improvement Project, Greenfield, MA:

Facilitating community engagement and technical writing/providing a summary of findings from the public workshop.

Intersection Improvements at U.S. Route 6 at
Lees River Ave, Somerset, MA: Technical specialist
to provide GIS mapping of the project area to ensure
compliance with Massachusetts Department of
Transportation (MassDOT)'s Early Environmental
Coordination Checklist (EECC); including identifying
project site proximity to wetland resources, historical
and cultural resources, public designated open space
and Environmental Justice communities.

Municipal Vulnerability Preparedness Planning,

Andover, MA: Technical facilitator to guide community engagement in the Town's Community Resilience
Building workshop and assist Town staff and other stakeholders in a process of identifying vulnerabilities and climate resiliency priorities. Following the workshop, detailed notes were compiled on the Town's priorities, and prepared a workshop report to meet state program requirements, ensure the Town's eligibility for future MVP funding opportunities, and document the Town's climate resilience priorities.

Climate Resilience and Sustainable Growth Plan, Executive Office of Energy and Environmental Affairs Planning, Belchertown, MA: Technical support for the Town's development of a Climate Resilience and Sustainable Growth Plan. Conducted an extensive review of existing plans and regulations to determine the Town's current goals related to sustainability. Condensed the detailed plans and regulations review into an easy-to-follow plan matrix. Developed engaging materials to facilitate

a community listening session, and prepared a memorandum following the listening session to convey the key takeaways.

Municipal Vulnerability Preparedness Planning,

Easthampton, MA: Technical support for the Town's effort to build resiliency to increased precipitation. Developed a homeowner's Do-It-Yourself (DIY) guide to residential-scale resilient stormwater solutions to help residents take the next step toward managing stormwater and increasing climate resilience in their own yards. The guide includes practical advice for planning, implementing, and tracking down resources/ vendors to support home rain garden projects, water harvesting, conversion of lawns to more habitat friendly, low-maintenance landscapes, and more.

Coastal Vulnerability Action Plan, Manchester- by-the-Sea, MA: Developed the project website, which provides information on progress, upcoming engagement opportunities, and space for people to leave feedback. Chelsea created materials for stakeholder engagement and helped to facilitate community engagement.

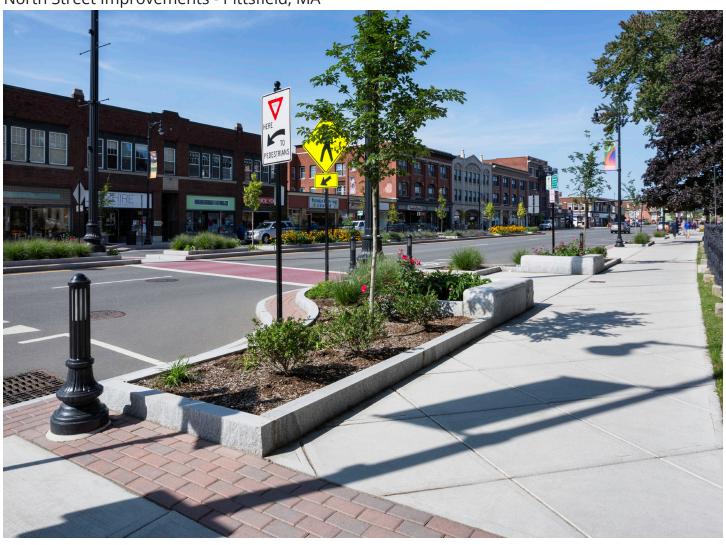
Flood Resiliency Study, Wareham, MA: Leading stakeholder engagement tasks including organizing and preparing meeting materials and facilitating stakeholder engagement.

Bank Street Flood Resilience Project, New London,

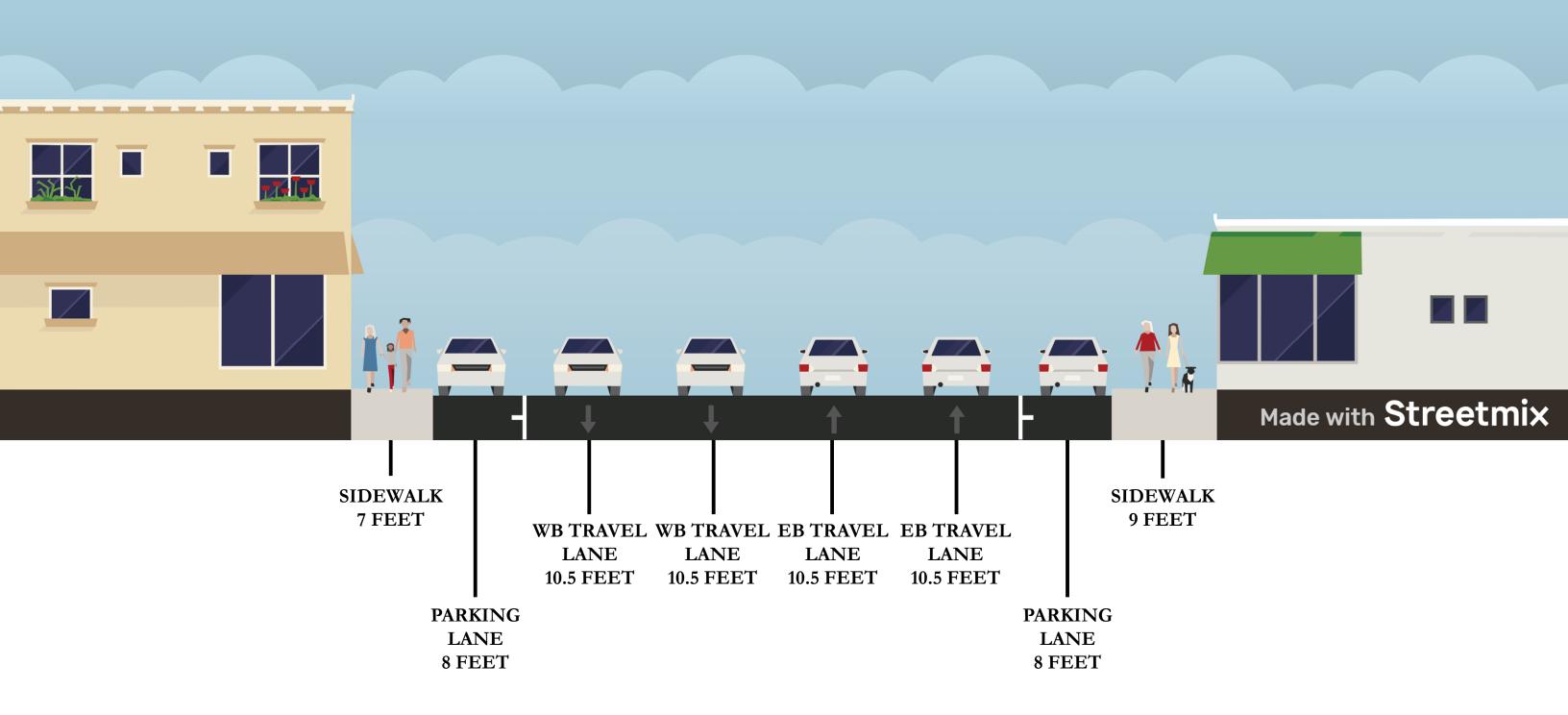
CT: Conducted a preliminary/high-level floodproofing assessment of all buildings in the project area. This project also includes a Benefit-Cost Analysis (BCA) to determine the future risk reduction benefits of a hazard mitigation project and compares those benefits to its costs.

SECTION 3 Conceptual Drawings

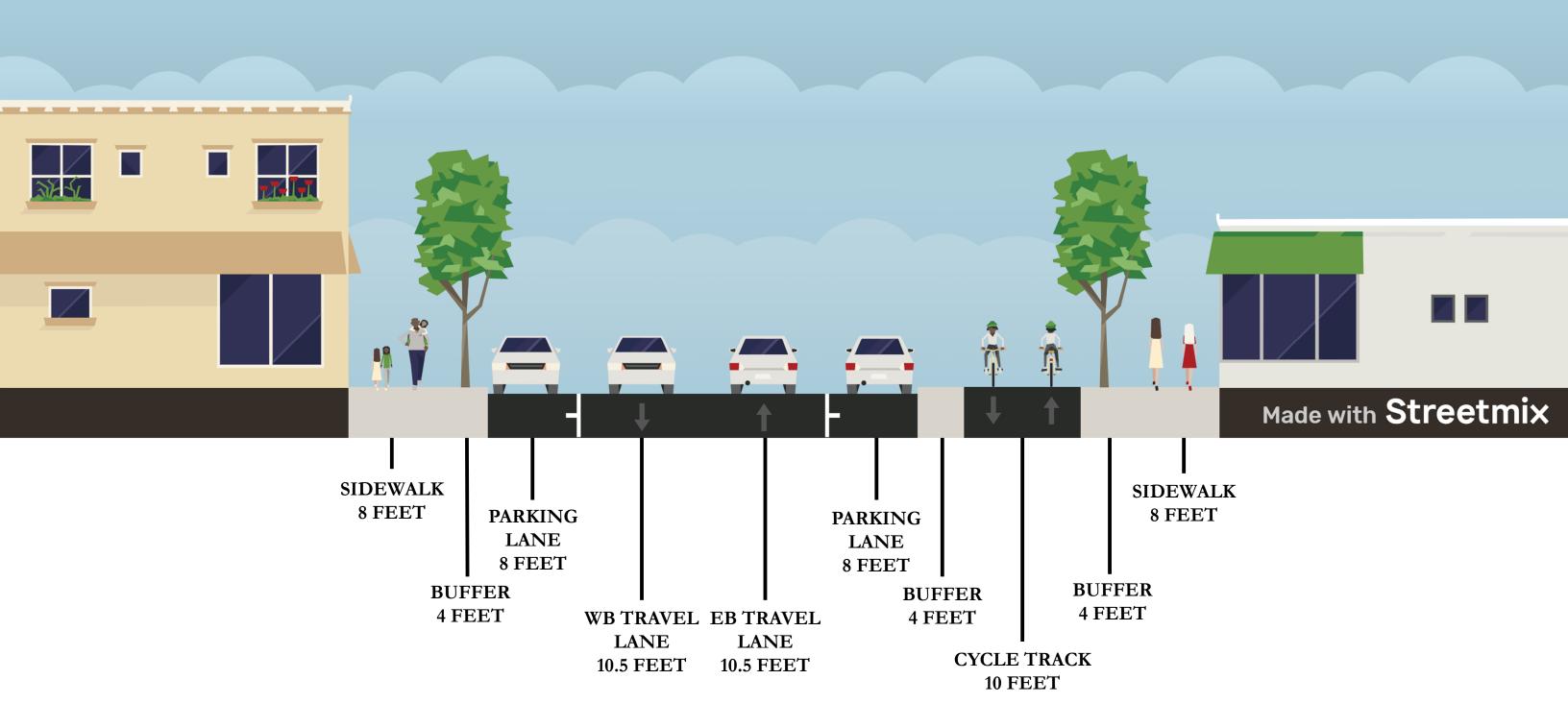
North Street Improvements - Pittsfield, MA



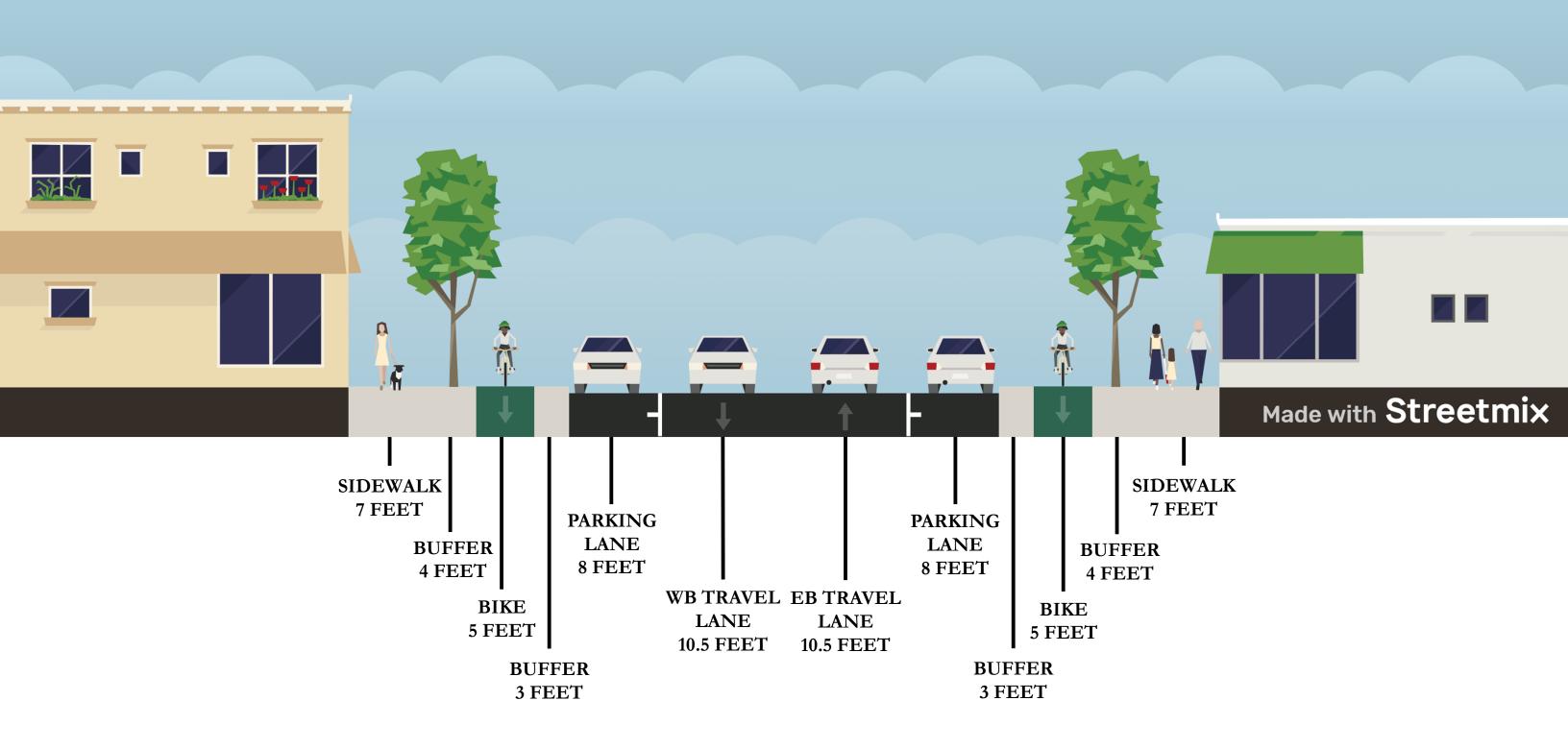
Existing Layout



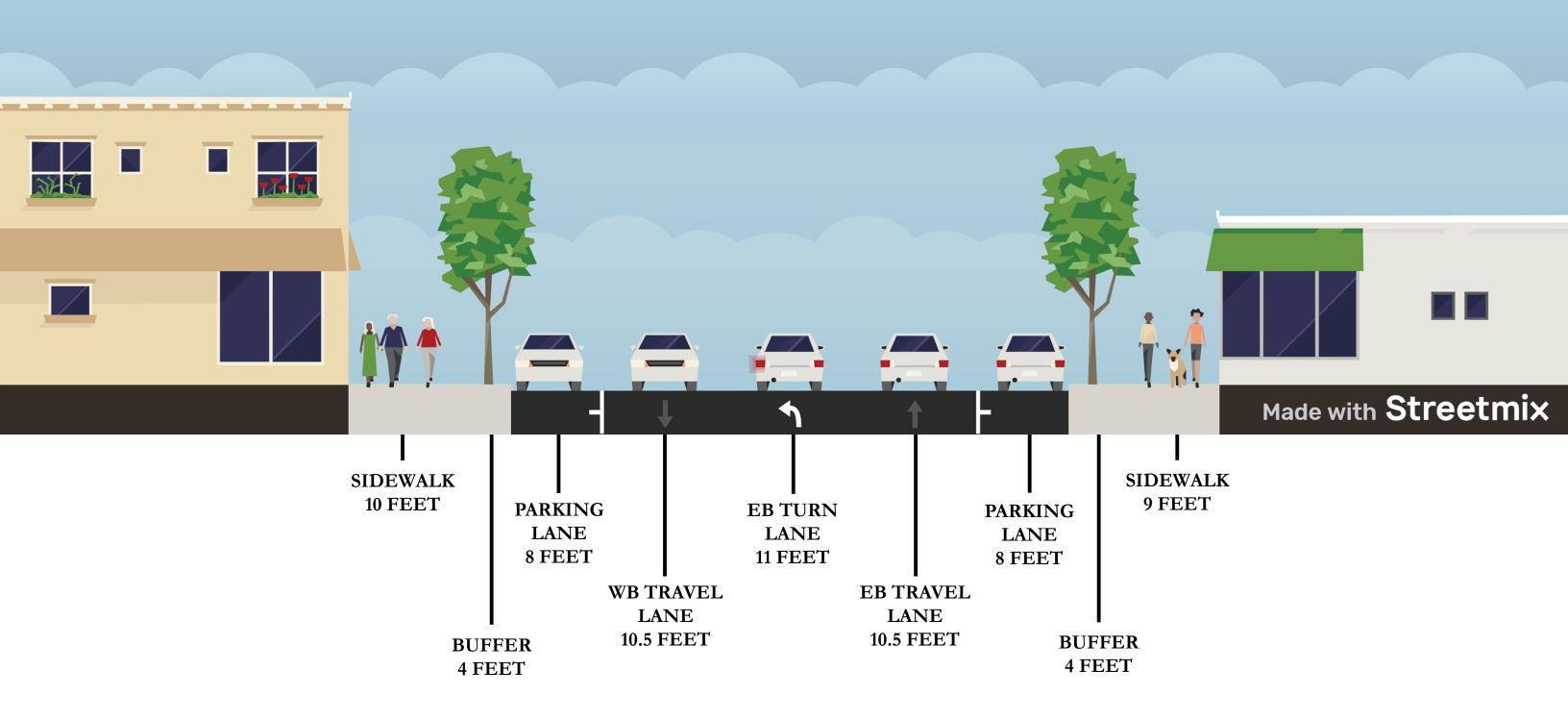




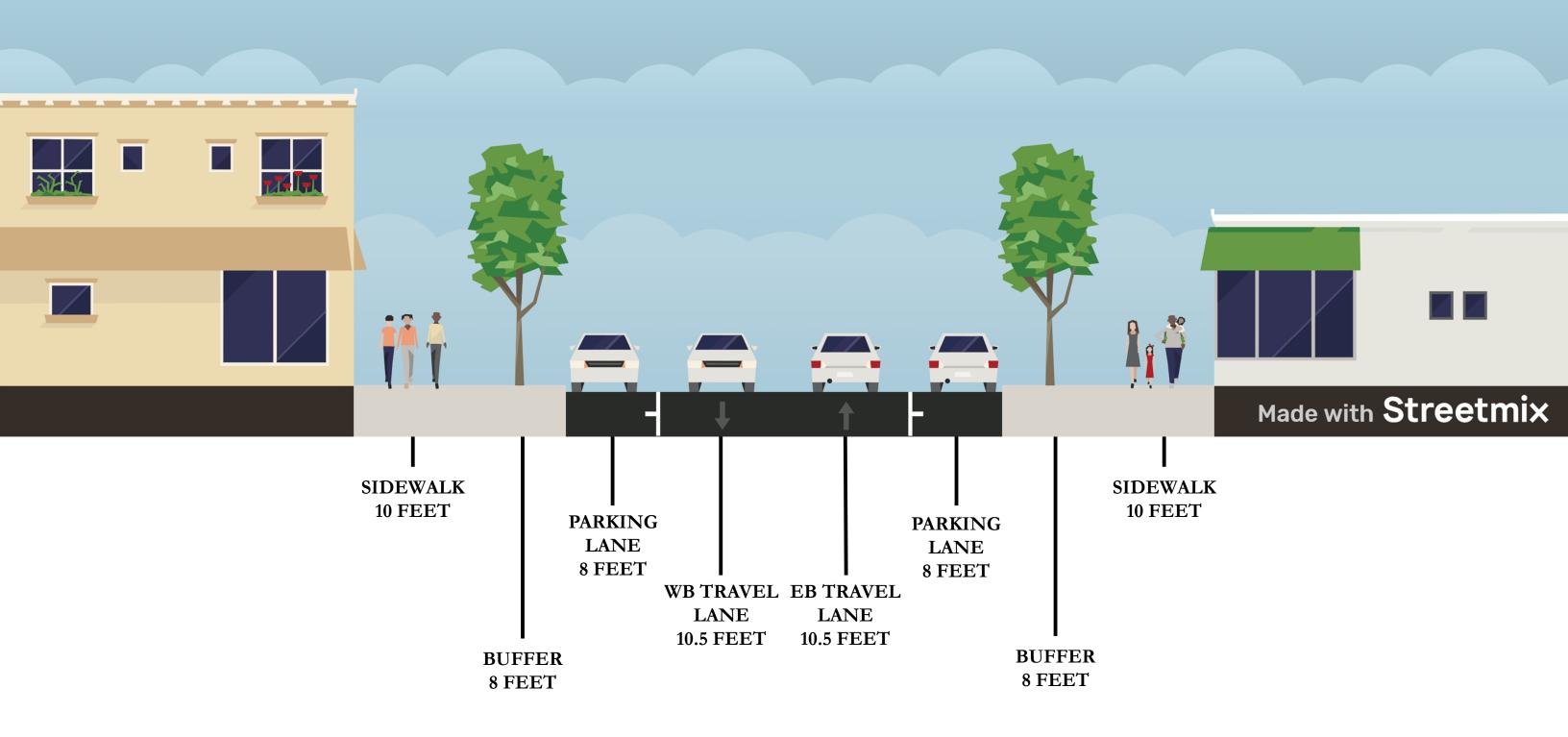














SECTION 4 Project Examples

King Street Corridor Improvements - Northampton, MA





Fuss & O'Neill is an agile, regional firm with 350 professionals based in 11 offices throughout New England and New York. In Massachusetts, we have three multidisciplinary offices in Boston, Quincy, and Springfield – each with a transportation design center who have experience designing Complete Streets projects throughout the Commonwealth.

Providing alternative modes of transportation that are context-sensitive is at the core of our design philosophy and approach. Our team focuses on where people want to go and the ability to deliver them safely to their destination through multiple travel options. We design infrastructure that supports the common Complete Streets and corridor redesign goals of creating livable, accessible, and safe communities.

We have worked with dozens of municipalities throughout New England in creating functional, sustainable complete streets designs. Projects include corridor transformations, land and road diets, traffic calming, curb radii reductions, and green infrastructure. Bicycle accommodations range from sharrows to dedicated bike lanes and cycle track facilities. Streetscape treatments include special sidewalk treatments, ornamental lighting, and amenities such as furniture and planters. In addition, our designs often include intersection capacity and safety improvements, mid-block crosswalks, on-street parking, and traffic calming measures. Our expertise in various methods of incorporating pedestrians and bicycles into the existing street corridors, combined with the use of innovative green infrastructure strategies, separates us from traditional firms.

Fuss & O'Neill's Active Design Group is a volunteer committee comprised of 30 professionals

Fuss & O'Neill's Active Design Group

with diverse backgrounds who are passionate about improving the safety and accessibility of our transportation network throughout New England. We meet monthly to share innovative ideas and best practices from neighboring DOTs that incorporate Complete Streets and healthy living with a focus on equity in Environmental Justice communities. We also organize weekend events, such as a family cycling

trip on the Ashuwillticook Rail Trail in Pittsfield, which our team designed for MassDOT and the City.

Example Corridor Projects

Signature corridor reimagination projects of a similar scope to the Great Plain Avenue Corridor are highlighted at the end of this section.

FUSS &O'NEILI

Active Design Group



complete streets techniques, and implements a road diet, which allows room for a separated bike lane that connects to the Northampton Bikeway.

We provided the design for improved bicycle and pedestrian facilities, enhanced safety, and alleviation of traffic congestion.

Coordination with stakeholders and community outreach were vital components of establishing project support for this MassDOT corridor improvement project.

Low-impact development stormwater techniques (e.g., on-street rain gardens and tree filters) were included in the design. Our team provided construction administration services, allowing us to take this project from preliminary design through final construction.







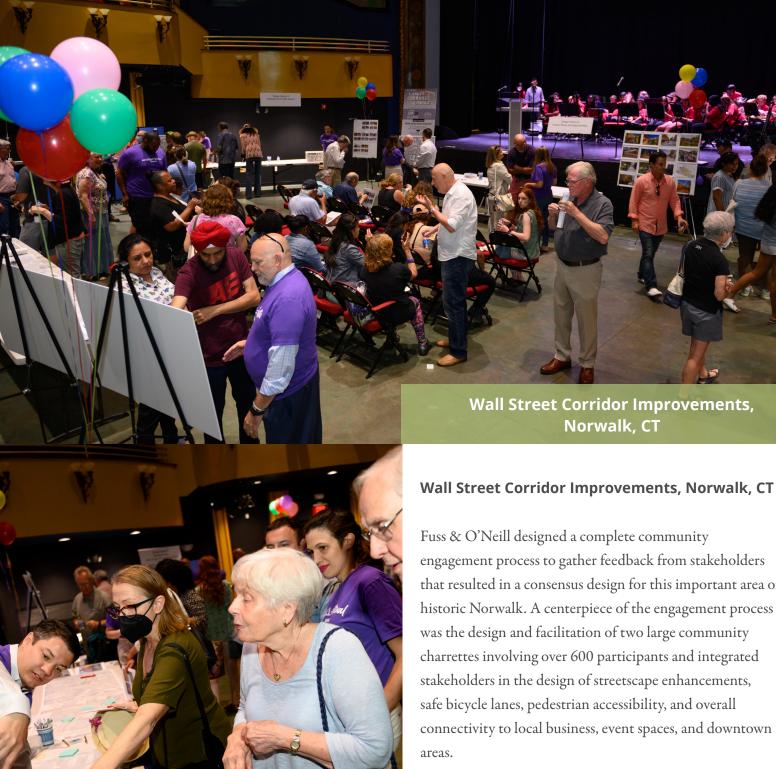
Downtown Transit-Oriented (TOD) and Revitalization Workshop, Bridgewater, MA

Fuss & O'Neill assisted the Town of Bridgewater in the creation of a collective vision for the future of its downtown and surrounding residential and industrial areas. The process engaged community leaders and stakeholders to create a plan that would preserve historic character, catalyze Downtown revitalization, create connections to MBTA transit stations and identify opportunities for redevelopment and housing creation.

Fuss & O'Neill designed and facilitated a public workshop that drew over 300 participants who attended and energized the consensus for a design; a huge success that is driving the Town's follow-on planning and implementation. The project will improve connectivity between the downtown and surrounding neighborhoods, preserve the community's historic character, revitalize underutilized properties, improve transit facilities, foster new residential development, and catalyze economic growth by attracting new startups while retaining existing businesses.



widening and/or roadway diets to better accommodate bicycles, traffic signal improvements and mid-block crosswalk enhancements, street-side bioretention facilities and rain gardens for roadway stormwater treatment, on-street parking, tiered pedestrian sitting walls, updated ADA compliant wheelchair ramps, trees and planters, and many other decorative sidewalk elements.



engagement process to gather feedback from stakeholders that resulted in a consensus design for this important area of historic Norwalk. A centerpiece of the engagement process was the design and facilitation of two large community charrettes involving over 600 participants and integrated stakeholders in the design of streetscape enhancements, connectivity to local business, event spaces, and downtown

In addition, Fuss & O'Neill provided preliminary and final design, traffic operations and safety evaluation, and coordination for roadway reconstruction on the Wall Street corridor.



Lexington Center into a vibrant, prosperous, walkable Town Center. The Comprehensive Master Plan created in 2022 and Strategic Tourism Marking Plan in 2020 set the stage for residents and Town leaders to explore a range of options for guiding and leading the future evolution of the

Lexington Center study area. The consultant team features the unique blend of Mullin Associates' policy, economic

team leadership, physical planning and participatory design skills.





- Bus pull off for Fish Market Stop
 Island to prohibit left turns from Jackson Street
- Crosswalk with pedestrian actuated crossing device



turn speed
2. Marked crosswalks and ADA compliant curb ramps to improve pedestrian safety

Bump out the southeastern curb line to reduce the number of travellanes and align the east/west legs. Protected two-

way cycle track

1. Extend The Green to the monument
2. Textured payement on the north side
intersection

1. Extend The Green to the monument
2. Textured payement on the north side
intersection

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W. MAIN ST.

Eliminate the east truncleft tyre ments, Waterbury rCTvehicle restriction; add an east purport of the south side of the Green



West Main Street Corridor Improvements, NVCOG, Waterbury, CT

The West Main Street corridor in Waterbury is a key connection between the West Side neighborhoods and the Downtown, as well a retail corridor and main route for vehicular traffic between Route 8 and Downtown Waterbury. The corridor lacks bicycle, pedestrian, and transit accommodations, and vehicle travel lanes are excessive in width and in number.



Through a robust public engagement process with community members and corridor stakeholders, Fuss & O'Neill identified existing weaknesses and opportunities for improvement along the corridor. The existing conditions assessment included a review of prior and ongoing studies, field visits, and multimodal traffic data collection. The project team used the findings of the community engagement and existing conditions assessment to develop a concept plan to redesign the corridor. The final preferred concept proposes to reduce the number of vehicle travel lanes through a road diet, allowing for bicycle accommodations, bus pull-off areas and landscaped areas. Additionally, the preferred concept plan depicts conceptual design of key intersections, which have been redesigned to mitigate existing vehicle safety deficiencies and reduce pedestrian crossing distances.





CT State Route 32, New London, CT

CT State Route 32, SCCOG, New London, CT

Connecticut State Route 32 is a regional connector running through New London that enables vehicles to make high speed connections between I-95 and I-395. The four-lane roadway, equipped with highway-grade infrastructure, divides the Connecticut College campus, severing east/west connectivity for pedestrians and cyclists. The wide shoulders, incomplete and inaccessible sidewalk network, long pedestrian crossings, and lack of cycling infrastructure create an unsafe and unpleasant environment for those who live, work, and visit the area.

Through a robust public engagement process with community members and corridor stakeholders, Fuss & O'Neill identified existing weaknesses and opportunities for improvement along the corridor. The existing conditions assessment included a review of prior and ongoing studies, field visits, and multimodal traffic data collection. The project team used the findings of the

community engagement and existing conditions assessment to develop a concept plan to redesign the corridor that included traffic calming elements designed to slow vehicle speeds, as well as off-street shared use paths to accommodate pedestrians and cyclists. Additionally, the team evaluated future options for the corridor that would be feasible pending other regional roadway improvements, including the potential for transit improvements.



Craig-Main Street Complete Streets, Schenectady, NY

SEPARATED 8' BICYCLE PATH

The Craig-Main Connection is a neighborhood-based Complete Streets project that reflects the ideas and inspirations of the community to transform the Craig Street and Main Avenue Corridor into a safe, inviting and inspiring connection between residents and community points of interest.

Craig-Main Street Complete Streets, Schenectady, NY

The community-led transformation of the corridor from an automobile-driven design to one that considers all travelers (including pedestrians, cyclists, and transit riders) is intended to facilitate and enhance linkages between community anchors such as schools, economic centers and not-for-profit community organizations.

In addition to physically connecting the Hamilton Hill and Mont Pleasant Neighborhoods, the project seeks to socially and culturally connect individuals and organizations with one another as part of a comprehensive

effort to strengthen both neighborhoods and build momentum for positive change.

The project was grounded in an extensive series of unique public outreach efforts and events that included a neighborhood liaison; an interactive project website; digital and paper surveys; stakeholder meetings; curbside conversations; a week-long design workshop that included a launch party, an open house, and a final presentation and discussion; open houses and attending neighborhood group meetings, and a public presentation. This project was awarded the 2020 American Society of Landscape Architects New York Upstate Chapter Honor Award for Research & Communication.



MassDOT Bottleneck Reduction along Hyannis Main Street, Barnstable, MA

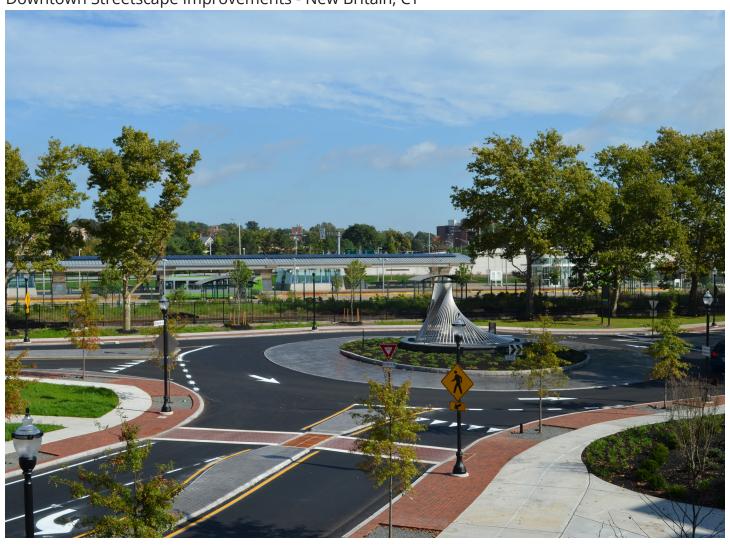
Fuss & O'Neill supported the Town of Barnstable with a Bottleneck Reduction Grant design project for signal upgrades in the Main Street area of downtown Hyannis. Despite conflicting goals and competing design initiatives between the Town and MassDOT Community Grants Department, collaboration proved essential in navigating the evolving project scope. Progressing from traffic analysis to plans, specifications, and estimate stage within a year, construction is scheduled for 2024.

The Town of Barnstable's approved Bottleneck Award Grant Application by MassDOT aimed at improving signals along Main Street in Hyannis initially proposed pedestrian signal installation and coordination. Fuss & O'Neill, however, found the proposed work unfeasible without complete signal infrastructure replacement. Amidst this, the Hyannis Great Streets Project altered Main Street's travel direction, influencing the bottleneck design. Through collaboration, the project scope was revised, incorporating new pedestrian signals, mast arm replacements for traffic signals, and video detection installation at key intersections, aiming to ease the local bottleneck caused by high traffic and insufficient signal equipment.

In a bid to accommodate the Town's plan for changing travel direction, Fuss & O'Neill designed the mast arm and signal head configuration to facilitate future changes without significant infrastructure modifications. The challenging and innovative design, addressing technical complexity and stakeholder goals, required essential communication between clients to secure bottleneck construction funding. The project is set for construction bidding in Spring 2024, with construction expected in Fall 2024, aligning with the goals of both the Town and MassDOT for community improvement.

SECTION 5 Certificate of Authority

Downtown Streetscape Improvements - New Britain, CT



Town of Needham

Downtown Redesign – Great Plain Avenue Corridor - Solicitation for Detailed Proposals 24DPW189M

Certificate of Authority

Complete Only If Applicable

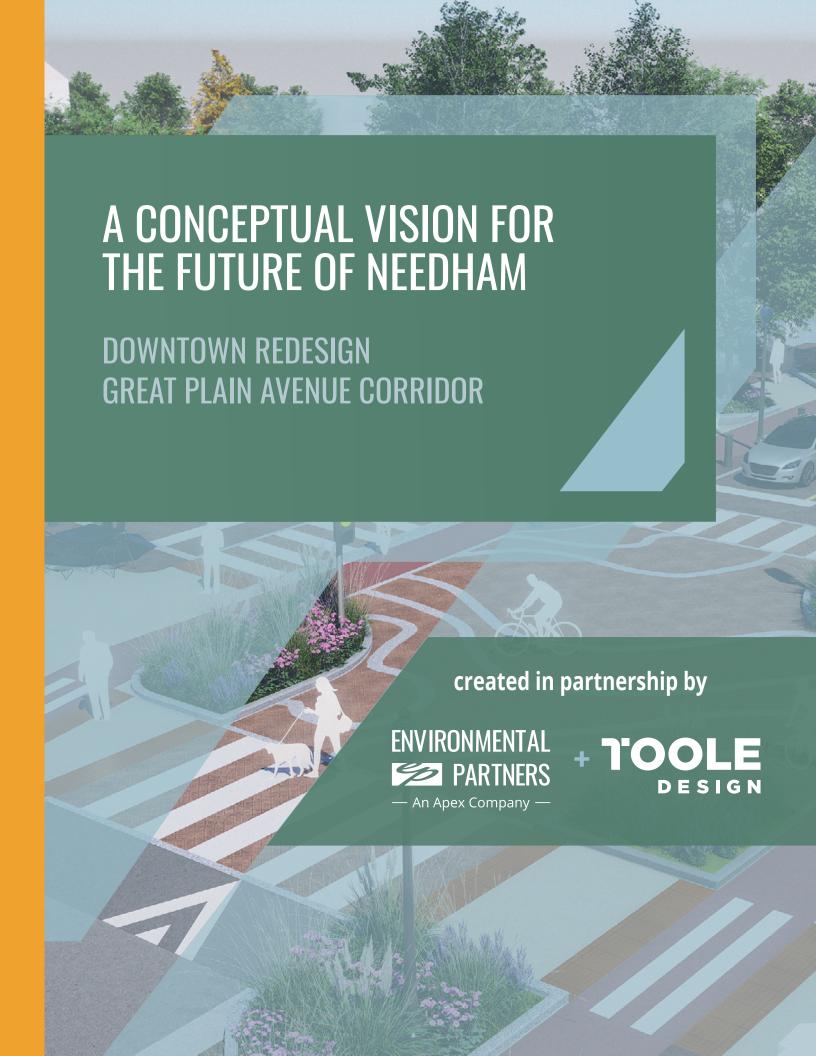
1.	I hereby certify that I am the Clerk/Secretary of Fuss & O'Neill, Inc. (insert full name of Corporation)					
2.	corporation, and that Kevin Johnson					
	(insert the name of officer who signed the contract and bonds.)					
3.	is the duly elected Executive Vice President					
	(insert the title of the officer in line 2)					
4.	of said corporation, and that on December 11, 2023					
	(insert a date that is ON OR BEFORE the date the officer signed the contract and bonds.)					
	at a duly authorized meeting of the Board of Directors of said corporation, at which all the directors were present or waived notice, it was voted that					
5.	Kevin Johnson the Executive Vice President					
•	(insert name from line 2) (insert title from line 3)					
	of this corporation be and hereby is authorized to execute contracts and bonds in the name and on behalf of said corporation, and affix its Corporate Seal thereto, and such execution of any contract of obligation in this corporation's name and on its behalf, with or without the Corporate Seal, shall be valid and binding upon this corporation; and that the above vote has not been amended or rescinded and remains in full force and effect as of the date set forth below.					
6.	ATTEST: AFFIX CORPORATE SEAL HERE SEAL HERE					
7.	Name: Tatia Lewis-Hayes (Please print or type name in line 6)*					
8.	Date: January 26, 2024					
J ,	(insert a date that is ON OR AFTER the date the officer signed the contract and bonds.)					

The name and signature inserted in lines 6 & 7 must be that of the Clerk or Secretary of the corporation.









Our collaborative team blends the expertise of engineering and urban design to reimagine the heart of Needham, embracing the tension between urban design and traffic engineering to meet the evolving needs of the community now and into the future.







Envisioning Tomorrow, Embracing Today:A Journey Towards a Vibrant and Resilient Needham

Environmental Partners and Toole Design Group are excited to present our shared vision for Needham's revitalized downtown. This vision, "Envisioning Tomorrow, Embracing Today," aims to redefine the heart of Needham into a vibrant, resilient, and inclusive community space that is both inspired by its rich heritage and tailored for its future.

Environmental Partners' extensive experience in local transportation design aligns seamlessly with the foundational goals of the Downtown Redesign effort. Our deep understanding of the local landscape, combined with a commitment to safe and sustainable infrastructure, uniquely positions us to address the dynamic needs of this project.

In partnership with Toole Design Group, a leader in urban design with a national perspective on creating people-centric environments, **our team brings a comprehensive approach to this endeavor**. Toole Design Group's expertise in integrating urban planning with innovative design strategies will ensure that Needham's downtown is not only safe and accessible for all but also vibrant, welcoming, and dynamic for the many needs of the community's residents and visitors.

Together, we are poised to embrace the inherent tension between traditional traffic engineering and urban planning, viewing it not as a challenge but as **an opportunity to innovate**. Our collaboration will focus on creating a balanced multimodal transportation network that supports economic development while enhancing public spaces and promoting environmental sustainability.

Our vision is to create a downtown Needham that serves as a model for future development—a place where community life flourishes in harmony with nature and modern urban demands. While some may consider the vision shown to push past their comfort zone, our intent is to provoke and inspire all stakeholders to think outside the box and envision what could be. We are committed to engaging with local stakeholders, understanding the unique needs of the community, and delivering a downtown area that reflects Needham's identity, values, and aspirations.

We are excited about the prospect of partnering with the Town of Needham to bring this vision to life. **Our team is ready to embark on this transformative journey**, leveraging our combined expertise to create a legacy that will be cherished by generations to come. Thank you for considering us for this pivotal project. We look forward to the opportunity to discuss our vision and approach in further detail.



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Margot E. Schoenfelder, PE, AICP
Project Manager | Environmental Partners

② 617.657.0980 | ☑ mes@envpartners.com

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PROJECT TEAM



BRINGING THIS PROJECT TO FRUITION

Our team is comprised of forward-thinking leaders, visionaries, creatives, and skilled technical designers from Environmental Partners and Toole Design. United by a shared enthusiasm for collaboration, we strive to realize a vision that embodies the essence of the Town.

For this pivotal project, we have carefully curated our team, members whose expertise not only mirrors but also aligns with the Town's ambitions. Each team member brings unique blends of diverse backgrounds, rich experiences, and innovative thinking within their respective fields.

Together, with Town leaders, we form a collective of community-building ambassadors, dedicated to transforming the Town's vision into reality.

Full resumes for all Team members are located in Section 05 - Qualifications.

PROJECT LEADERS

VISIONARIES

CREATIVES

TECHNICIANS

- Environmental Partners Team Member
- Toole Design Team Member



Conrad Legel -unrad Leb Jac Project Oversight







Jim Fitzgerald Fitzger design





Jason De Gray Juson Vesion Advise Senior Vision Advise





Alex McKeago Urban Design



Jane Davis Traffic Design





Benny Hungs JEIINY HUILD DESERT





Ryan Hayden Transportation Design







AS WE SEE IT...

Today, Needham's Downtown starkly embodies the vehicle-centric planning ethos of past decades, a testament to an era when accessibility, pedestrian friendliness, and alternative modes of transportation were afterthoughts. Wide roads and parking dominate the landscape. With infrastructure designed around motor vehicles, the Downtown lacks the inviting charm of downtowns being designed and developed today for the needs of tomorrow.

The current configuration presents tremendous opportunity. By shifting the mindset and focus, the Town has a once-in-a-lifetime opportunity to transform this space by reallocating the public realm to stimulate economic development and recreate a vibrant, sustainable, and resilient space. This welcoming hub will become a destination for current and future residents and visitors of Needham.



BACKGROUND

Downtown Needham was developed around the emergence of the booming 19th-century with industrial growth occurring throughout towns surrounding Boston. During this era, Great Plain Avenue became the trade center for Needham, offering residents and visitors goods and services to meet their everyday needs and providing a social center where neighbors met neighbors and new acquaintances and folks enjoyed entertainment while gathering to celebrate important cultural events.

As a direct east-west corridor, **Great Plain Avenue served as an important travel route through the center of Needham.**Over time, this corridor felt the same transportation pressures as many other main thoroughfares, resulting in a vehicle-centric right-of-way while compromising the safety and comfort of individuals utilizing alternative transportation methods to journey to and through the downtown.



PRIMARY PROJECT CONSIDERATIONS

Through past public outreach efforts the Town has recognized that the public realm within Needham's Downtown should be redesigned to prioritize people and safety to effectively accommodate all modes of transportation.

The Town's recent investments in the Great Plain Avenue area have focused on improving safety and placemaking in downtown and, in the process, have built a strong foundation and established a design direction that provides this project with the basis for a vision. These past studies and implementations have also nurtured a desire to re-envision the downtown.

We understand this is a pivotal moment for Needham and the choices made today must benefit and serve future generations. We recognize there are many current and future competing demands on the downtown public realm, including mixed land uses and the growing demands for housing, multimodal transportation, environmental improvements and climate mitigation needs. Simultaneously, there is a desire to maintain the character and architectural aesthetic of the downtown center. We believe these factors can all be addressed and woven into an achievable vision for a uniquely vibrant town center.

AREAS OF OPPORTUNITY







CULTURAL SHIFT

The recent "reset" represents a desire for dramatic change, a pivot from the conventional approach of sacrificing the Town Center for motorists seeking to find the fastest cut-through route.

With the correct vision and inspirational yet attainable ideas, the corridor has incredible potential to become a vibrant, thriving downtown that attracts residents and visitors alike.

PEDESTRIAN ACCOMMODATIONS

Under existing conditions, pedestrian accommodations do not always feel safe. Given the number of travel lanes, crossing the street can be challenging.

Pedestrian crossings of Great Plain Avenue and its many cross streets (especially Chapel Street, Highland Avenue, Dedham Avenue, and Chestnut Street) are excessively long, with widths of up to 80 feet.

CYCLIST ACCOMMODATIONS

There are numerous bicycle destinations within the Town Center itself, including the commuter rail station, shops, and restaurants. However, these destinations cannot be easily or safely accessed in the current condition.

Cyclists mostly avoid the existing integrated bike lane, opting to utilize sidewalks and crosswalks instead. While some bicycle racks exist, there are no formal bicycle accommodations to access them.







STRATEGIC PLACEMAKING

Needham Center has attracted a great number of beloved shops, restaurants, and cafes. However, each use has only minimal sidewalk space to attract people passing by, and there is a lack of consistent street trees, green space, seating, art, and other placemaking elements to promote pedestrian stopping and/or gathering.

Given the current lack of placemaking amenities along the corridor and the majority of the corridor being occupied by motorists driving and/or parking, pedestrian stopping and gathering is not adequately promoted in the current condition.

LANDSCAPE AMENITIES

The recently renovated Town Common represents a tremendous amenity and opportunity for the downtown area. However, the combination of walls and other vertical elements between this open space and the abutting sidewalks creates a visual barrier, discouraging pedestrian integration between the sidewalks and the Common and leaving pedestrians feeling gated away from the space.

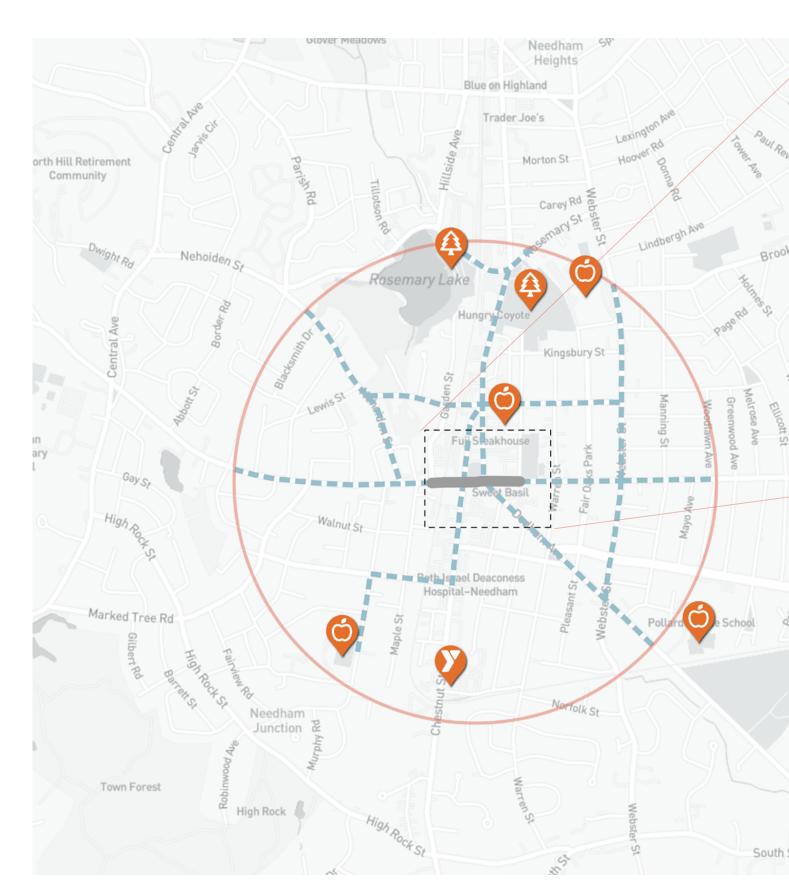
Furthermore, the corridor currently incorporates landscape elements through only sporadic street trees, largely dominated by pavement and other impervious hardscape elements.

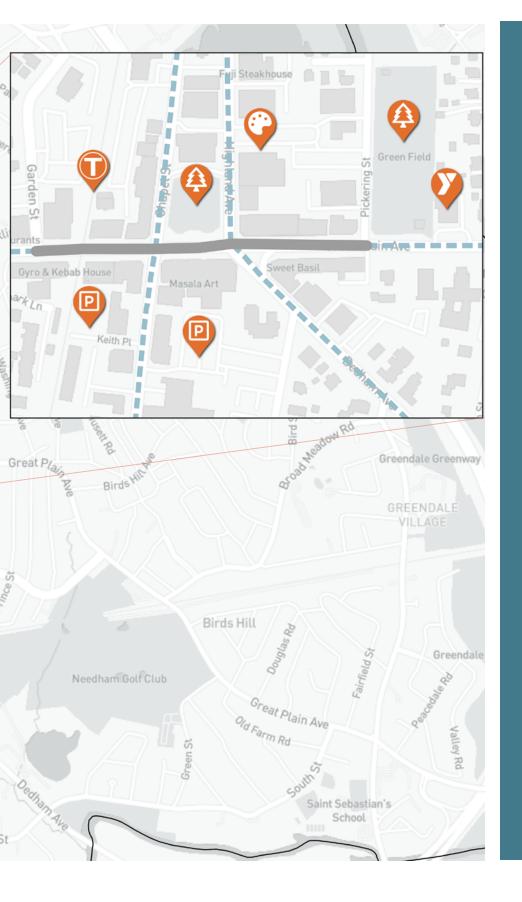
ZONING CHANGES

As an MBTA Community, the amount of multi-family zoned housing within and adjacent to the project limits is anticipated to increase through site redevelopment.

This potential increase in density within Needham Center further solidifies the need to create a public zone that prioritizes people, safety, and comfort such that the Center truly becomes a walkable and bikeable "neighborhood" where people can live, eat, work, and access transit without relying on single-occupancy vehicles.

COMMUNITY CONNECTIONS

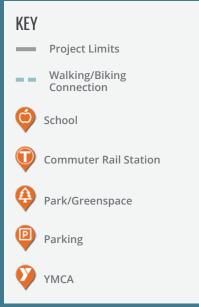




The influence of this community-building project will extend beyond its immediate boundaries, underscoring its potential to reshape community dynamics.

In visioning community development projects, pinpointing key considerations becomes crucial. This map delineates areas within a ¾-mile radius, highlighting the strategic locations we factored into our analysis concerning routes to and from the downtown.

Additionally, the detailed inset on the right offers a closer look at the specific considerations within and surrounding the downtown area itself, showcasing our thorough assessment of the project's potential broader impact on the community.







PROJECT APPROACH

To streamline the process and ensure this project meets the Town's ambitious schedule, we divided our approach to the project into three distinct phases— Community Visioning, Stakeholder Engagement, and Design + Construction.

COMMUNITY VISIONING

The initial phase, community visioning, serves as the foundation for the entire project. It involves comprehensive planning and conceptualization, where we synthesize community aspirations, environmental considerations, and urban design principles to outline a cohesive vision for the corridor's transportation infrastructure and streetscape. This stage is critical for setting clear objectives and priorities, enabling the project team to align their efforts towards a unified goal.

STAKEHOLDER ENGAGEMENT

The second phase, stakeholder engagement, is vital for incorporating diverse perspectives and building consensus around the project.

This phase involves reaching out to local businesses, residents, city officials, and other stakeholders to gather input and feedback on the vision and preliminary designs. Engaging stakeholders early and often ensures that the project benefits from a wide range of insights and addresses the community's needs and concerns.

This inclusive approach not only fosters public support and ownership of the project but also helps to identify potential obstacles and opportunities early on.

DESIGN + CONSTRUCTION

Finally, the design/construction phase brings the vision to reality, translating the comprehensive planning and collaborative insights gained from the previous phases into physical improvements. This phase is characterized by detailed design work, technical specifications, and the actual construction activities.

Leveraging the groundwork laid during the visioning and stakeholder engagement phases allows for a more streamlined and effective design/construction process. It ensures that the project remains aligned with the community's expectations and the initial vision, while also adhering to the established timeline, budget and regulatory requirements.

Efficient project management and coordination during this phase are crucial for mitigating risks, addressing any unforeseen challenges, and ensuring that the changes to the Downtown are completed to the satisfaction of all stakeholders and within the town's aggressive schedule.

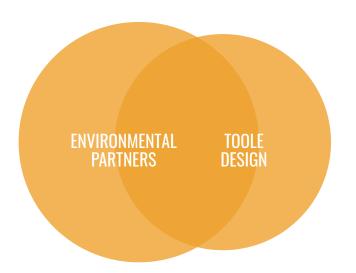
COMMUNITY VISIONING









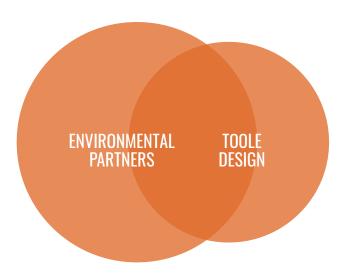


STAKEHOLDER ENGAGEMENT









DESIGN + CONSTRUCTION

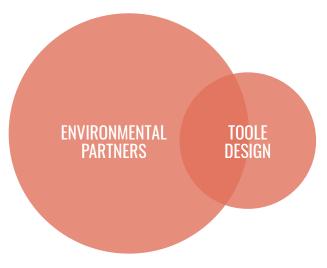


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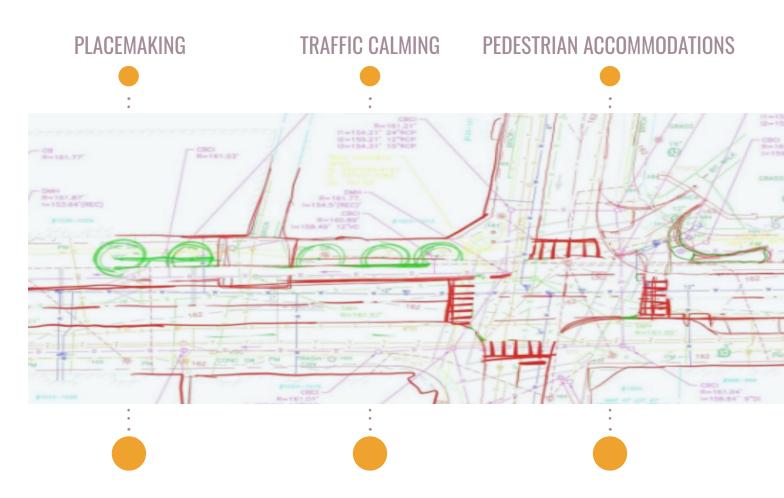






WHAT • · · · · · HOW

At the core of the Needham Downtown Redesign is a **bold and forward-thinking Vision that creates a truly people-oriented place**, blending innovation and aesthetics with tested engineering. **Our Vision for the Downtown redesign prioritizes:**



Needham's downtown character is preserved & accentuated while creating vibrant and welcoming public spaces. Special pavers, furnishings, and lighting are used to reflect and define the character of the downtown.

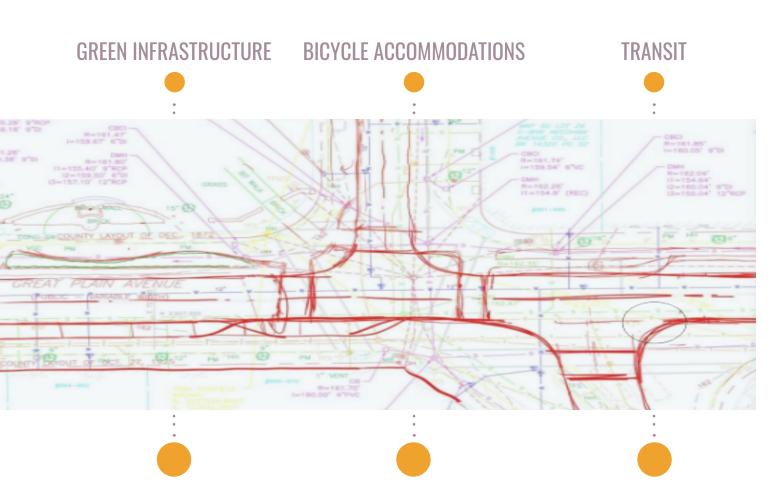
Opportunities for public art, including sculptures, kinetic pieces, surface murals, water elements, and/or spaces for temporary installations, will be explored.

A myriad of strategies, including chicanes, raised intersections, and road diets, are employed to slow motorists down and keep speeds slow throughout the project limits. Successfully calming traffic is a critical component in creating a thriving downtown area that prioritizes pedestrians and bicyclists.

Design elements enforce the notion that pedestrians are prioritized along the central block of Great Plain Avenue between Chestnut Street/Chapel Street and Dedham Ave/Highland Ave.

Needham Center is transformed into an accessible, walkable, and equitable public realm. People walking and rolling are provided safer conditions through wider sidewalks, shorter crosswalks, accessible infrastructure, and pedestrian amenities.

In this manner, pedestrians can move safely and comfortably throughout the downtown, creating a barrier-free environment.



Sustainability and ecology are integral to the design. Large, shady trees and diverse plantings provide seasonal interest and a thriving habitat for native species. Climate-positive landscapes and streetscapes are incorporated to mitigate the local effects of a changing climate.

Various green infrastructure best management practices are incorporated into the design, including permeable pavers, rain gardens, and a reduction in impervious area to collect, treat, and manage stormwater at its source. Bicycling is promoted within the downtown through the inclusion of sidewalk-level bicycle lanes along Great Plain Avenue and shared streets along Chapel Street and Highland Avenue.

Providing facilities that are comfortable, safe, and convenient for even the least experienced bicycle rider is critical for embracing the use of nonmotorized travel modes for all ages and abilities.

Transit ridership is promoted through more comfortable and inviting bus shelters as well as the use of placemaking strategies at alleyways to connect the MBTA Station and parking lot to Great Plain Avenue and Chapel Street.

ABOVE CONCEPTUAL SKETCH | KAREN FITZGERALD | TOOLE DESIGN





IMAGINE THE POSSIBILITIES...

With the correct vision and inspirational yet attainable ideas, the corridor has incredible potential to become a vibrant, thriving downtown - an ideal destination for the Needham community.





IMAGE CONCEPTUAL VISION RENDERING | GREAT PLAIN AVE. @ HIGHLAND TO WARREN STREET GRAPHICS PRODUCED BY TOOLE DESIGN



THE FUTURE OF GREAT PLAIN AVENUE

Rooted in a people-centric approach, we envision a downtown Needham inspired by the charm of bustling historic town centers yet built for the dynamic needs of the present and future.

In the heart of Needham, we strive to seamlessly integrate beauty, safety, resilience, and innovation, to foster the essence of a connected and thriving community. We see a harmonious coexistence between people, nature, and modern infrastructure – a vibrant town center of tomorrow that encourages connection, supports the local economy, and enriches lives.

A DEEPER DIVE INTO

OUR VISION

Great Plain Avenue has the potential to be transformed from a vehicle-centric thoroughfare into a welcoming, livable street that encourages walking, rolling, bicycling, and gathering while strengthening transit connections.

Our team's vision for this area of Great Plain Avenue as the core of the downtown is centered around promoting a sense of comfort, enjoyment, and vitality. The vision aims to accomplish this goal by recognizing this section of the corridor as a whole, where the entire right-of-way and ancillary spaces are knitted together, and by designing generous people-oriented spaces where people can move through safely, with opportunities to stop, shop, rest in the shade, and linger.

In an effort to streamline the presentation of our vision, we have broken our effort into two focus areas: Urban Design & Transportation. Below, we provide a detailed look of how our team plans to approach each category and potential topics for consideration when finalizing our approach with the Town. As you read, we challenge you to consider the challenges of today while thinking boldly about the possibilities of tomorrow.



URBAN DESIGN

What makes a street more vibrant?

The answer is "people". Great Plain Avenue has the potential to become a place where people will want to gather, not just walk, roll, bike, and drive along.

PLACEMAKING

We envision creative placemaking as playing a critical role in the quality and lasting success of the Needham Downtown Redesign.

Our team's approach to placemaking for the Town Center is to maintain and celebrate the character and cultural history of the neighborhood while also enhancing the identity and social cohesion of the downtown.

Our team will identify opportunities where sidewalks can be used to provide shade, safe and attractive lighting, bike parking, bike share accommodations, wayfinding, and seating. Seating can take a variety of forms within the Town Center, including seat walls, seating cubes, fixed benches, and even movable bistro tables and chairs. The latter might be provided by adjacent development, but often municipalities will also provide them.

Our team has utilized these same strategies with great success, including in the Newtonville Village Center Project, where a road diet, wider sidewalks, and custom street furniture provided gathering spaces where none existed before.

Our team knows that Great Plain Avenue needs to better accommodate the needs of the bicycling community. Wider sidewalks will allow for bike racks as well as the potential for locating bikeshare facilities. Proper bicycle accommodations also reduce the wear and tear on other street elements that end up serving as bike racks when proper accommodations are not provided.

Other elements that can be incorporated into the streetscape to make it more livable and usable include wayfinding, interpretive elements, and works of public art, especially if the community is involved in the artist selection process and/or the artist is local to the community.

Many of the streetscape projects with which our team has been involved have helped the municipalities achieve their goals of enhanced economic development, where vacant storefronts and vacant parcels ultimately filled up with new and vibrant development. As an MBTA community, such an economic boost will be important for Needham to encourage the right types of redevelopment as density increases.

Our vision is intentionally thought-provoking, designed to encourage readers to envision what 'could' be.

PUBLIC ART

Public art is intertwined with placemaking and essential to maintain and build social and cultural connection to a neighborhood and community space.

Public art is critical to the aesthetics, identity, and social fabric of a place. While the physical outcome of the design is important, it is the process; the community engagement and empowerment to co-create, that is vital to lasting and sustainable placemaking. The key to the success of a "place" is the establishment of our feeling of connectedness, where we have the opportunity to play a role in, not only the creation, but also the care and maintenance of these public places. It is these spaces, where art reflects our community history and future, our environment, and our connection to it, that we cherish and want to gather, maintain, and preserve.

Identifying and developing meaningful opportunities for public art in all its forms within the streetscape, greenspaces, alleys, building walls, and structures will be an integral part of the design process. Public art plays an important role in strengthening economic vitality and resiliency. Leveraging design excellence that includes artbased creative placemaking, not only improves the experience for people, but is also a smart business strategy. To make public art impactful, our team will guide and facilitate a Needham community-driven process, engaging sectors of the community, local artists, businesses, and other stakeholders, ensuring that art and placemaking play a central role throughout the design development process.

GREEN INFRASTRUCTURE

Our team firmly believes that green infrastructure, in all its forms, is a critical element in designing outstanding public realm spaces.

Street trees, understory plantings, and green stormwater facilities all contribute to the resiliency, comfort, and beauty of successful public spaces.

We will work collaboratively to strategically locate and maximize green stormwater facilities that are sustainable and maintainable using a holistic approach. These facilities will be designed so they look and feel like landscape areas set within the corridor rather than stormwater infrastructure. The facilities will be designed to capture, treat, and infiltrate stormwater at its point of generation, consistent with Massachusetts MS4 and Stormwater Management Standards as well as the Town of Needham Stormwater By-Law and accompanying Regulations.

The Town's Regulations require infiltrating the first inch of runoff and incorporating Low Impact Development/Green Infrastructure facilities as well as removing phosphorus from stormwater. We understand the Town of Needham is required by the MS4 permit to remove 55% of its annual phosphorus load over the next 20 years. The incorporation of green stormwater facilities will assist the Town in meeting this regulatory target.



TRANSPORTATION

The optimum combination of well-balanced multimodal treatments can be truly transformative. Dedicated bicycle facilities, expanded pedestrian spaces, and inviting streetscape amenities must be considered simultaneously to achieve the appropriate balance, not only for the Great Plain Avenue corridor but Needham Center as a whole.

While every project is unique, the Needham Center project is special given its potential to be a true destination for the community, a vital connection in the Town's growing bicycle network, and home to future residents of Needham as the MBTA Zoning Act will likely bring higher-density housing to the area. As such, providing custom, out-of-the-box treatments based on best practices in combination with extensive input received from stakeholders and Town officials will be key.

All members of our project team have a long history of identifying innovative ways to accommodate all modes of transportation for users of all ages and abilities given the many critical benefits it provides to the communities that we serve and live in. Multimodal accommodations provide safe accommodations for current users and are further intended to attract more users to these alternative modes of transportation; encouraging such a mode shift will be increasingly vital as housing density continues to increase.

ROAD DIET / TRAFFIC CALMING

Travel speeds play a critical role in providing safe multimodal accommodations.

A road diet along Great Plain Avenue could afford precious right-of-way width for bicycle and pedestrian improvements and much-needed green space and gathering opportunities within the core of the downtown center while simultaneously reducing travel speeds along the corridor and alter motorist driver behavior to be cautious and courteous of other modes of transportation.

Thoughtfully repurposing the public space within Needham Center and providing visual cues that the Center is designed for non-motorists first and foremost will allow for a true transformation of the area, creating a thriving destination that unites the Needham community.

Our team will evaluate traffic and speed data to determine what traffic calming features in addition to a road diet are warranted or might be considered for advancement to achieve the Town's objective of 20 mph travel speeds. From subtle traffic calming treatments, streetscape features and ornamental pavement surfaces, to more substantial treatments, such as roundabouts, chicanes and bump-outs, our team will assist the Town in identifying the level of effectiveness for each treatment type and designing them to fit the appropriate location at hand.

The degree of traffic calming and roadway narrowing along Great Plain Avenue ultimately selected by the community will influence travel patterns in the area and therefore will be taken into consideration during the decision process. Delays resulting from road diet treatments along Great Plain Avenue will encourage cut-through motorists to avoid Great Plain Avenue and instead pursue an alternate route in the area, influencing exit selection along Route 128 and circulation regionally and returning Needham Center to the community.

PEDESTRIAN ACCOMMODATIONS

Pedestrian accommodations and amenities will be the most critical factor in making the vision for Needham Center as a vital and thriving downtown a reality.

In this setting, providing minimal sidewalk widths that merely comply with ADA requirements will not suffice. Instead, the pedestrian realm must promote a sense of comfort, with walking, furniture, and frontage zones that encourages visitors to stroll the Center and gather instead of merely passing through.

Our team will present treatments to dramatically enhance pedestrian accommodations compared to existing conditions with the goal of providing a comfortable, inviting pedestrian experience. These accommodations will not only improve safety along the corridor but also encourage walking and gathering and promote use of alternate parking opportunities by providing much needed visual connections to parking opportunities behind buildings via alleyways.

Although our primary focus will be accommodations along Great Plain Avenue, we will expand our vision to outside project limits to take into consideration long-term planning and ensure continuous and consistent treatments in the future linking the community and the numerous residential neighborhoods along the corridor. We will work with the Town to establish the preferred alternative for wider, continuous sidewalks with streetscape amenities that promote walking and community gathering opportunities.

Green space is certainly an important element when considering pedestrian comfort. Our team will present tactics to maximize green space to make the most of the limited right-of-way width given the reallocation of space from motorists, transforming the expansive hardscape in creating a comfortable environment that is environmentally considerate. The combination of a potential road diet and bump outs will dramatically shorten pedestrian crossing distances, limiting pedestrian exposure to motorist traffic. Careful consideration will be made to ensure that pedestrians waiting to cross will be outside of the path of passing bicyclists.

BICYCLE ACCOMMODATIONS

The role that bicycling can play in achieving Needham Center's vision is significant. However, noteworthy cyclist usage along a roadway like Great Plain Avenue can only be achieved by the incorporation of low-stress bicycle accommodations that are comfortable for even the least experienced user.

While there are already numerous bicycle destinations within the Town Center itself, including the commuter rail station, shops, and restaurants, connections to surrounding roadway networks and neighborhoods will be critical to increase bicycle demand. Our team will work with local bicycle advocates and Town officials to consider both interim and long-term solutions for the surrounding roadway network to ensure the selected vision for the Town Center aligns and is connected with that of the surrounding network, including the Bay Colony Rail Trail.

As part of the design and public outreach process, we will work with key stakeholders and Town staff to present alternatives that will focus on user experience for various types of people who ride bicycles. Bicycle accommodations will include not only protected facilities along Great Plain Avenue but also thoughtful intersection treatments to ensure that bicycle level of traffic stress remains low throughout the project limits.



SECTION 04 | OUR VISION



TRANSIT

Our team will also focus on promoting transit-oriented development and addressing the dilemma of the "last mile", connecting people from transit hubs to their destination.

Certainly the aforementioned bicycle and pedestrian accommodations will be helpful with this mission. In order to further promote such a need, additional bicycle racks are anticipated to be included throughout the project limits, including adjacent to the Needham MBTA station and at key bus stops. Comfortable pedestrian walkways with visual connections between the commuter rail station and Great Plain Avenue and Chapel Street will further promote integration of transit use into the daily lives of the community.

Our team will encourage and support transit use by improving the comfort and accessibility of bus stops adjacent to the project limits. Our team will utilize both MBTA guidance and best practices, including the guidelines set forth by the National Association of City Transportation Officials (NACTO), to make transit stops more comfortable and accessible for existing and potential transit users.

PARKING + LOADING

Our team fully understands the sensitive nature of parking.

The frequent perception is that every parking space is necessary and must be retained. However, given past parking studies performed by the Town, it is clear that parking opportunities remain unused in many areas of Needham Center. Our team is equipped to guide the Town in prioritizing between retaining parking and increasing pedestrian gathering spaces along each segment of roadway to achieve the best overall solution. Our team will evaluate all parking options to meet or exceed the project's goals and objectives, including making the best use of underutilized parking opportunities currently perceived as inconvenient.

Recognizing the importance of loading zones for local businesses, restaurants, and residences, our team will provide a strategic approach in accommodating the variety of loading needs, from large-scale deliveries to Amazon drop offs. Where feasible, we will work with local businesses in promoting access from the rear of buildings and minimizing large on-street deliveries to off-peak periods. Elsewhere, our approach will balance precious curbside space between streetscape amenities, the desired degree of on-street parking, and loading with areas serving a dual purpose to make efficient use of space. Where permanent loading zones and parking are included, consideration will be made for decorative pavement treatments to provide the perception of road narrowing and tie into the sidewalk realm.



MOTORISTS

This project is anticipated to focus on the community's desire to reclaim their Town Center rebalancing accommodations between the different modes of transportation and promoting bicycle, pedestrian, and transit uses.

In achieving this mission, our team proposes to view motorists cutting through the Center as "guests" instead of as the prioritized user. Currently, most motorists entering Needham Center are merely cutting through without stopping to access any of its many destinations or amenities the location has to offer. The more efficient the accommodations for motorists, the more traffic is attracted as a cut-through route. Over time, this has resulted in more travel lanes, taking away from amenities and comfort of other users.

As such, our team will perform a comprehensive evaluation researching fluctuations in traffic, understanding crash history, and modeling potential redevelopment in the area with input from interviews with Town officials and the public. We will take the unconventional approach of evaluating impacts of desired lane configurations that benefit the well-being of all users instead of designing around existing traffic volumes.

Depending on the preferred degree of motorist travel within the Center, we will identify appropriate traffic control options at study intersections, including considerations for roundabouts (or mini-roundabouts) and traffic signals. Where traffic signals are desired, our team is experienced at designing state-of-the-art traffic signal equipment to coordinate the corridor and adapt traffic signal settings and timings to fluctuations encountered with Adaptive Signal Control, reducing driver frustration and discouraging motorists from running red lights. potential transit users.



SPOTLIGHT ON TACTICAL URBANISM

Our team has extensive experience bringing concepts to life by working with our clients and community groups to test and demonstrate different uses of the public right-of-way. This practice of tactical urbanism—also known as street prototyping, quick-builds, pop-up projects, and pilots—can demonstrate what can be done when public space is designed with people in mind.

Should the community proceed with a bolder option that dramatically changes the cross-section along Great Plain

Avenue, tactical urbanism is a great option to enable the community to experience an on-the-ground prototype of a proposed design.

The traditional method of project development is design-bid-build. Tactical urbanism adds two more elements: design-test-refine-bid-build. If the prototype doesn't work, it can be discarded without much cost. If it does, it can be enjoyed in a temporary sense and then made permanent. This incremental approach allows the community to shape the design while they are experiencing it. Tactical urbanism can often be a way to gain support from those that don't engage in typical outreach options, and the practice can yield valuable data.

THIS CORRIDOR HAS **EXTRAORDINARY POTENTIAL**TO TRANSFORM THE ENTIRE DOWNTOWN.



The goal of creating an accessible, walkable, and bikeable neighborhood where people can live, eat, work, and access transit, deprioritizing single occupancy vehicles and creating a more vibrant and welcoming corridor makes this project's mission vital to a resilient Needham.



OUR PRIORITIES WITHIN OUR CONCEPTUAL VISION...

Our team explored many options as we collaboratively envisioned the possibilities. Based on this initial exploration, we prioritized the following interventions within our proposed Vision:

PEDESTRIAN INFRASTRUCTURE

- ✓ Curb extensions / bumpouts
- Reductions in curb radiiPedestrian refuge islands
- ✓ Daylighting Rectangular rapid-flashing beacons
- ✓ Pedestrian signal improvements

PLACEMAKING

- ✓ Street trees
- ✓ Seasonally diverse plantings
- ✓ Street lighting
- ✓ Benches & dining areas
- √ Wayfinding
- ✓ Public Art

GREEN INFRASTRUCTURE

- ✓ Permeable pavement
- Rain gardensBioswalesInfiltration trenches
- ✓ Reduction in impervious area

BICYCLE INFRASTRUCTURE

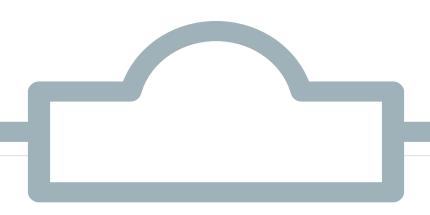
- ✓ Sidewalk-level bicycle lanes Buffered on-road bicycle lanes Two-way sidewalk-level cycle track
- ✓ Bicycle crosswalks
- Protected intersections
 Bicycle boxes & two-stage turn boxes
- ✓ Bicycle parking BlueBike stationBike repair station

TRAFFIC CALMING

- ✓ Road diet
- Raised intersectionsRaised crosswalks
- Chicanes
 Mini-roundabouts
 Medians / pedestrian islands

TRANSIT

- ✓ Comfortable & accessible bus stops
- ✓ First- & last-mile connections



OUR QUESTION FOR YOU...

HOW BOLD WOULD **YOU** GO?

With myriad opportunities to reinvent the experience of Great Plain Avenue, what design features and interventions do YOU feel should be woven into this project?

Note your priorities and preferences on this worksheet!

PEDESTRIAN INFRASTRUCTURE

- Curb extensions / bumpouts
- Reductions in curb radii
- O Pedestrian refuge islands
- Daylighting
- Rectangular rapid-flashing beacons
- Pedestrian signal improvements

PLACEMAKING

- Street trees
- Seasonally diverse plantings
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- O Benches & dining areas
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- O Public Art

GREEN INFRASTRUCTURE

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TRAFFIC CALMING

- Road diet
- Raised intersections
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- Chicanes
- Mini-roundabouts
- Medians / pedestrian islands

TRANSIT

- O Comfortable & accessible bus stops
- First- & last-mile connections





INSIGHT INTO

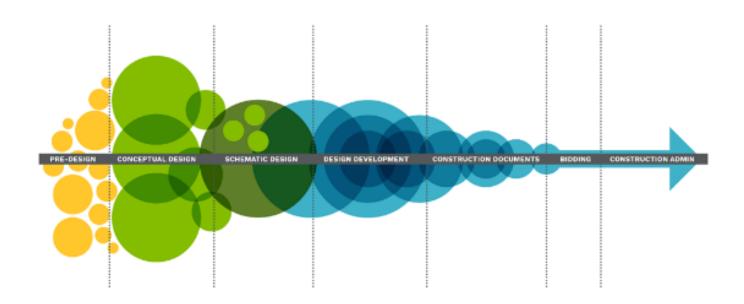
THE COMMUNITY DESIGN MINDSET + PROCESS

Environmental Partners + Toole Design share core beliefs that the people of Needham should help shape their community.

THE COMMUNITY DESIGN PROCESS

Our goal is to plan and build spaces that empower people to move freely, safely, and spontaneously. When we invest in the networked public landscape of streets, sidewalks, and transit infrastructure, we assert the value of a civic realm that welcomes all.

We have the civic responsibility as designers to work seamlessly across our specialties to create memorable, high-quality places. We define Community Design as the execution of multidisciplinary design, facilitated by seasoned professionals and industry leaders in co-equal partnership with community members and organizations, as a means by which true civic spaces can be achieved for the use and enjoyment by everybody.







Through our proposed Community Design Framework—co-creation and collaboration with the community—we aim to encourage and facilitate new ways for residents to connect to their corridor and its amenities.

Our approach to public and stakeholder outreach is centered on the notion that plans can only bear fruit when community members are at the center of developing solutions and making decisions. When community members own a plan, they are positioned to think about the desired future, and determine the steps to reach implementation.

As a central community space, we recognize that we need to plan alongside the community to understand their relationship with the Great Plain corridor. The pairing of public realm improvements that are identified by the business and resident of the Needham community are what would make design solutions successful.

We understand a community design process is an opportunity to challenge our thinking, understanding, and approach to issues, in as much as they are opportunities to broaden how we conceptualize and prioritize possible solutions. We value and center lived experiences in our planning and design by considering and openly discussing the impacts and benefits of design outcomes.

Our outreach program is developed to coincide with the project schedule and the design process. We will target milestone opportunities to invite feedback that will advance the project design, asking the right questions at the right time is critical to receiving valuable input. An outreach plan can take many forms, at the beginning of any project we work with the community leaders to learn how best to engage the public and stakeholders to tailor the Project Engagement Plan to the needs of the community.

POTENTIAL PATHWAY FOR SUCCESSFUL PUBLIC ENGAGEMENT + INCLUSION

Gaining the support of the community, business community, and other stakeholders is essential for the success of this project.



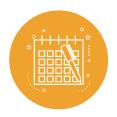
We recognize that this project will require clear communication and involvement between the various municipal boards and departments as well as effective public outreach and stakeholder engagement. Such efforts are critical to gain understanding and support from the public, stakeholders, and local officials.

Our team anticipates a particularly high degree of collaboration & consensus building given Needham's highly engaged and activated community and the tradeoffs inherently necessary to achieve the Town's vision for Needham Center. Those who own or shop at businesses, take the train, or walk, bike, and drive through the project limits all have different and often conflicting needs for the public realm.

Our team understands that early and effective engagement that reaches the various stakeholders is necessary to both generate excitement and gain buy-in on this important project. Our team has a proven track record of working with communities to do just that. We are adept at translating feedback and distilling it into design solutions.

To facilitate our communication and outreach program, we have broken down our public engagement approach into three stages: vision consensus building, design-phase stakeholder engagement, and construction outreach.







STEP 1 CONSENSUS BUILDING

Priorities & Project Goals
Tradeoff Identification

STEP 2 STAKEHOLDER COMMUNICATIONS

Refinement & Buy-in on Project Details Schedule Updates Construction Sequencing

STEP 3 CONSTRUCTION UPDATES

Community & Abutter Impacts

Step 1 - Consensus Building

The initial phase of re-visioning the downtown area of Needham requires a robust and inclusive approach to building consensus among stakeholders and the community. This process begins with the development of a project brand that resonates with the town's unique identity and aspirations. The brand will serve as a unifying symbol, encapsulating the project's goals and the community's hopes.

To effectively engage the community, we propose a series of interactive public workshops titled that will utilize a blend of traditional and innovative techniques. Some techniques that can be utilized include:

- Interactive Mapping Sessions
 Leveraging digital mapping tools, participants will be able to pinpoint specific areas in downtown and suggest improvements or changes. This visual and hands-on approach helps articulate and compile diverse viewpoints
- Story Circles

Small group discussions, guided by facilitators, where residents and stakeholders share their personal stories and connections to the downtown. This narrative approach fosters emotional investment and a deeper understanding of diverse perspectives.

Design Charrettes

The charrette process aims to capture the vision, values, and ideas of the community - with designers sketching these on to the Charette to create ideas about the future as fast as they can be generated by the participants. Charrettes are a fun and innovative way to engage the public, especially in projects where there is a significant landscape, streetscape, or other interesting design elements.

All inputs and ideas from these sessions will be compiled and presented in a comprehensive "Vision Document," which will be made available both online and in printed formats for wider community review and feedback.

Step 2 - Stakeholder Communications

During the design phase, maintaining momentum and interest is crucial. We propose a multi-channel communication strategy to keep the community informed and engaged:

- Monthly "Design Digest"
 Newsletter
 An engaging digital newsletter providing updates on the design progress, featuring interviews with project team members, spotlights on specific design elements, and opportunities for community feedback.
- A dedicated project website, such as a StoryMap, will serves as a hub for information, updates, and engagement. The portal will feature an interactive timeline, design renderings, and a Q&A section where community members can submit questions directly to the project team.
- Pop-Up Info Booths
 Strategically located in high-traffic areas of the downtown, these booths will provide physical spaces for people to learn about the project, view design materials, and speak directly with project representatives.

Step 3 - Construction Updates

As the project moves into the construction phase, transparent and continuous communication becomes even more critical to maintain community support and manage expectations:

- Regular Community Briefings
 Scheduled meetings in
 community centers where
 the project team provides
 construction updates, timelines,
 and addresses any concerns or
 questions from residents.
- "Behind-the-Scenes" Tours
 Organized tours of the
 construction site for residents
 to witness the progress
 firsthand and understand the
 complexities involved in the
 project.
- Real-Time Construction Updates
 Utilizing social media and the
 project website to provide real time updates on construction
 progress, traffic changes, and
 any other immediate impacts to
 the community.
- Feedback Loops
 Continuously gathering feedback through surveys, comment boxes at the site, and online platforms to gauge community sentiment and make adjustments as needed.



Creating a project identity and brand can be a powerful way to aid in communications, build consensus and drive home a sense of community.

It is important for any project -- particularly one that has the potential to change the fabric of a community. We believe that an effective branding campaign can impact the acceptance and support of the vision from key stakeholders and can ultimately impact the overall project success.

Our team sees a unique opportunity to encapsulate the vision of this project – Needham as a people-focused, forward-thinking community – into a full-lifecycle project campaign that helps:

- Shift mindset and gain support viewing this effort as a unified initiative for the betterment of the community
- Create an identity
 strategically defining this
 initiative and making it
 recognizable from the visioning
 stage through construction
- Connect with the Community take proactive measures to share the project's successes, efforts, and future

Our team's Creatives have extensive experience in creating project identities & campaigns that are utilized by both the municipality and design team for community outreach materials, presentations, social media posts, and more.

Recent successful Environmental Partners projects utilizing this strategy include Andover's Active Transportation Plan (below), Wellesley Sustainable Mobility Plan and Brookline's Transportation and Mobility Plan.



POTENTIAL PATHWAY FOR SUCCESSFUL

INTERNAL ENGAGEMENT + INCLUSION

With highly invested committee, council, and community members, collaborating with and gaining internal support will be vital.

Our team predicts that gaining input and support from key stakeholders within the municipality but outside of the primary committee/group assembled for this project will be vital for best outcome and the ability to bring it to fruition.

We have identified numerous committees and volunteers groups who will likely have important perspectives into building the final Vision for this project. The graphic on the right provides an example list of such committees and groups as a starting point.

We will work closely with the project team to ensure that this list of committees and councils is extensive and inclusive.

Our goal is to ensure all voices have a voice and seat at the table during the visioning & design process to achieve buy-in and enthusiasm for the final product.





SECTION 06 DESIGN + CONSTRUCTION



REBALANCING DOWNTOWN

The Needham Downtown Redesign project will be the catalyst that establishes the framework for future development and reinvigorates Great Plain Avenue and surrounding public spaces to strengthen its role as the heart of the Town.

The time has come to rebalance the use of precious space that makes up the Town Center to fit the desires of the community by providing safe, comfortable and attractive gathering, walking, and biking spaces, a place where motorists are viewed as guests instead of the primary user.

The redesigned space will speak to the people of Needham while accentuating the downtown's character. The process to achieve these goals is broken down within this section.

COLLABORATIVE DESIGN TO EXECUTE THE VISION

Our team will work collaboratively with the Town to create a plan that aligns with the established vision but also addresses feedback provided by the community and stakeholders.



When initiating the design phase, our team will develop a plan for integrating the key insights and community goals collected during the visioning and stakeholder engagement phases. In this manner, the design will not only implement the overarching vision but also meticulously consider the feedback and insights from the community and stakeholders.

Our team's design will aim to create a vibrant, accessible, and sustainable downtown that can be enjoyed by residents, business owners, and visitors alike. The design will aim to stimulate economic vitality by fostering an environment that supports local businesses and encourages redevelopment, turning the downtown area into a bustling hub of activity.

Environmental sustainability will be incorporated through green infrastructure treatments, the promotion of sustainable transportation modes, and enhanced biodiversity to align with the Town's resilience and environmental objectives. The objectives underpinning these goals include ensuring the design enhances accessibility and mobility for a diverse range of users, including people walking, bicycling, and using public transportation, thereby creating a safe and inclusive environment for all. The design will also seek to transform public spaces into engaging, functional, and aesthetically pleasing environments that encourage social interaction, cultural expressions, and community events. Ongoing collaboration with stakeholders is paramount throughout the design process to ensure the project not only reflects but also accommodates the diverse needs and aspirations of the community it aims to serve.

However, achieving any bold vision, particularly one involving a re-allocation of public space, comes with its set of challenges arising from the need to balance the diverse interests of various stakeholders, including residents, business owners, environmental advocates, and government officials. Such balancing requires a nuanced approach to manage and reconcile varied and often conflicting expectations and priorities. Aligning the innovative aspirations of the design with the practical realities of budget and timeline constraints further necessitate a design solution that is both creative and pragmatic to deliver high-quality outcomes within the aggressive schedule set forth by the project.

This cohesive narrative approach underscores our team's commitment to a comprehensive and integrated design process that honors the project's initial vision and stakeholder feedback, ensuring the successful and sustainable revitalization of the downtown.

DESIGN PROCESS

Following an effective design process is critical to maintaining good communication and understanding throughout a complex project.

While projects may have different 'Phase' definitions and deliverables, our team uses the following guiding structure to ensure that design parameters are defined and creative options are explored, resulting in a community-driven final design where expectations are met. We understand that while we present a thought-provoking vision, it is only the start of a conversation and there are many decisions, ideas, and details to explore in finalizing the vision to suit the Town and its stakeholders.

PRE-DESIGN

Defining the Parameters

To begin the design process, we will take what we've learned through visioning and stakeholder engagement and investigate design influences such as existing site conditions and future development plans to define future contractual items such as budget, schedule, and project scope.

Questions we're asking and things we're exploring...

- What programmatic elements are to be considered?
- What are the "must have" items resulting from the visioning process?
- What site conditions do we need to know for design of the space?
- What are the cultural, ecological, historical overlays that might impact and influence this site or the context?

Things we're doing...

- Finalizing design considerations with stakeholders
- Initiating investigations and research
- Documenting critical criteria and design influences

At the end of Pre-Design the design team should have...

- A clear understanding of project focus and parameters (what is "on" or "off" the table)
- Necessary initial investigations completed
- A clear story of the project area and beginning sense of what may inspire design interventions, concepts, and palettes



CONCEPTUAL + SCHEMATIC DESIGN

The "What If?" Phase

Conceptual Design involves the application of the

Pre-Design phase into spatial ideas, and includes brainstorming and issue resolution. We believe it is important to not limit creativity at this stage and allow for expansive in thinking within the context of the project. We will explore multiple design concepts that are both derived from, and are used to help develop program, principles, and performance metrics.

Next, Schematic Design will refine the programmatic scope, spatial, and scalar organization to arrive at one or two clearly defined and feasible design plans after exploring the most promising alternative design solutions.

This may include: additional studies or vignettes of specific areas, refined illustrative concept graphics (plans, sections, perspectives), establishing design character of materials, furnishings, and landscape palettes.

Questions we're asking...

- How do we want people to experience the space?
- How can we solve existing issues to realize the project goals?
- What elements uncovered in pre-design research spark inspiration?
- Does the design ultimately selected align with the vision and stakeholder feedback?

Things we're doing...

- Creating spacial ideas and advancing concepts, details, and material options in increasing degrees of detail
- Studying design ideas from multiple vantage points
- Sketching, considering options, looking for examples to convey ideas
- Working with the community through design workshops and other outreach activities.
- Starting to think about materials and design element options
- Possible on-site demonstration projects

At the end of Conceptual + Schematic Design, the design team should have...

- A preferred viable design solution that best aligns with the vision, program, and project goals and is supported by the Town following a comprehensive alternatives analyses including consideration for how each alternative would work and feel, and fit within site constraints
- Order of magnitude construction costs

DESIGN DEVELOPMENT

Design Advancement and Bid Document Preparation

The purpose of this phase is to advance renderings of the preferred alternative into detailed design that addresses physical constraints and conditions in a phased manner, increasing in degree of detail. The proposed plan agreed upon from schematic design is advanced and further developed to become the final design.

This phase will Include: finalized illustrative graphics, establishing horizontal and vertical geometries, designing drainage and green infrastructure treatments, detailing traffic controls, finalized furnishing and landscape palette, supporting narrative development of draft design details, supporting calculations and opinions of cost, and possible construction phasing considerations.

Questions we're asking

- How will the proposed design perform?
- Are design details fully resolved? If not, what is still needing to be resolved?
- Does the design meet the construction budget expectations

CONSTRUCTION

Things we're doing...

- Refining / finalizing design decisions
- Documenting decisions and design impacts
- Opinions of probable costs

At the end of Design Development, the design team should have...

- Finalized design solutions, material decisions, and all accompanying required elements as required by scope of work to move into final design and construction documentation
- Plans, specifications, and opinion of probable construction costs quality control

From vision to reality

The Construction Phase, when handled properly, can be an exciting and rewarding experience for the community, local officials, and the design team. Seeing what were once concept renderings become tangible treatments that transform any location, especially a town center, is exciting. However maintaining a positive experience throughout construction will rely heavily on regular communication, maintaining access by all users, responding to the needs of abutters, and building confidence with the community, another specialty of our Team. We look after the Town's best interests while promoting seamless progression, resulting in a pleased public and an amazing downtown.

Questions we're asking...

- Would the Town consider an interactive online platform to allow abutters to submit questions/concerns for response?
- What is the schedule of largescale deliveries for abutters?
- Where could stockpiling of materials occur without inconvenience of abutters or visual disturbance?
- Would off-peak or nighttime construction be considered to shorten construction duration?

Things we're doing...

- Monitor construction full time
- Act as an extension of the Town by overseeing construction complying to the bid documents
- Identify opportunities for reducing costs while maintaining a high quality end product
- Review shop drawings and payment requests
- Maintain regular communication with local officials, DPW, police, and abutters

At the end of the Construction Phase, the team should have...

Public and local officials
 who were well informed
 and experienced minimal
 inconvenience during
 construction and are enjoying
 a transformed, dynamic
 town center



CROSS SECTION

GREAT PLAIN AVENUE @ TOWN COMMON



EXISTING CONDITIONS

With four travel lanes and two parking lanes totaling a pavement width of 62', the current street treatment along Great Plain Avenue in front of the Town Common prioritizes motorists traveling to or through the downtown over all other modes. The narrow 8' wide sidewalk along the storefronts provides limited opportunities for pedestrian gathering or stopping, and the shared-lane bicycle treatment is daunting for all but the most confident bicycle riders.

OPPORTUNITIES

There are ample opportunities to reallocate the public realm along this portion of Great Plain Avenue to prioritize those walking, rolling, or biking within the downtown. With the right interventions, the roadway can serve as the gateway into & an extension of the various community amenities in the area instead of a barrier between them.

HIGH-LEVEL INTERVENTIONS

In our vision, expanded sidewalks and dedicated bicycle facilities (shown here as sidewalk-level bicycle lanes) are critical for increasing pedestrian and bicyclist safety and comfort.

Traffic calming is achieved by both a road diet and raised intersections on Chapel Street and Highland Avenue. One parking lane remains to provide continued access to abutting businesses, but the pavement footprint is visually narrowed through the use of a raised parking lane. Nature and sustainability are weaved into the design through permeable pavers, a consistent tree canopy along both sides of the corridor, and pocket rain gardens along the parking lane.

A **BOLDER** VISION

Pushing the envelope further, we envision this portion of Great Plain Avenue as a raised street to further embrace this location as a vibrant, welcoming destination for the community.





CROSS SECTION

GREAT PLAIN AVENUE - WEST OF CHAPEL STREET



EXISTING CONDITIONS

Along this portion of Great Plain Avenue, 52' of the 72' available in the public realm is currently allocated to motorists as travel lanes and parking. The remaining 20' consists of sidewalks having only sporadic street trees and no other consistent pedestrian amenities, discouraging all non-utilitarian foot traffic. As with the portion of Great Plain Avenue in front of the Town Green, the shared-lane bicycle treatment does not encourage bicycle use by much of the community.

OPPORTUNITIES

The public realm along this portion of Great Plain Avenue can foster a sense of community and better prioritize those walking, rolling, or biking within the downtown by reallocating space to bicycle facilities, streetscape, and landscape elements.

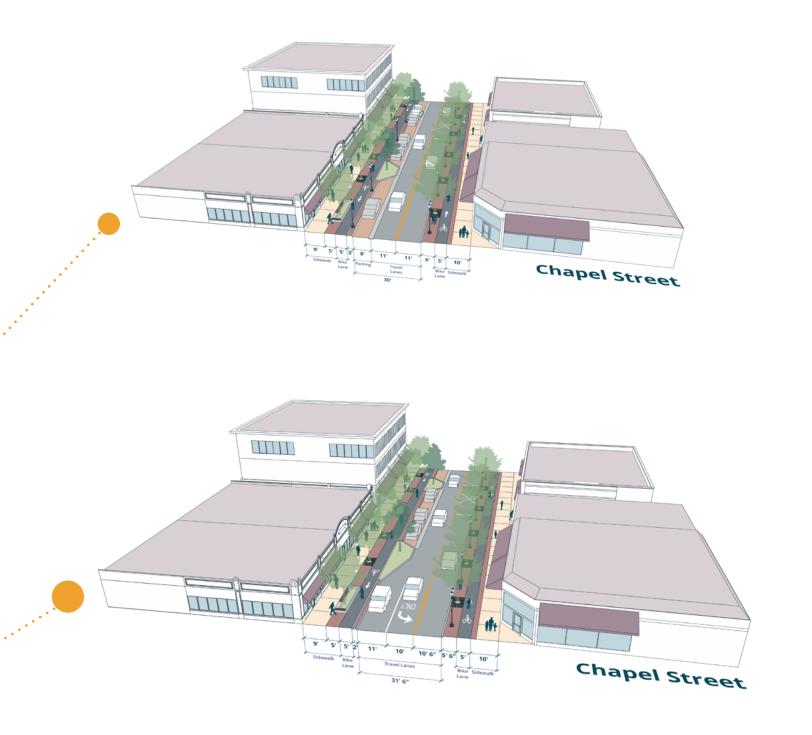
HIGH-LEVEL INTERVENTIONS

Our vision utilizes dedicated bicycle facilities (shown here as sidewalk-level bicycle lanes) and various pedestrian amenities, such as benches & decorative lighting, to encourage foot traffic and provide increased comfort and safety to non-motorists.

Traffic calming is achieved by reducing the paved width from 52' to 22'. One parking lane remains to provide continued access to abutting businesses, but the pavement footprint is visually narrowed through the use of a raised parking lane. Nature and sustainability are weaved into the design through permeable pavers, a consistent tree canopy along both sides of the corridor, and pocket rain gardens along the parking lane.

A **BOLDER** VISION

An eastbound left-turn lane can be provided within our vision without compromising the proposed amenities for non-motorists by further scaling back the amount of parking along this community-oriented downtown corridor.



CROSS SECTION

GREAT PLAIN AVENUE - EAST OF HIGHLAND AVENUE



EXISTING CONDITIONS

This section of Great Plain Avenue contains four travel lanes and two parking lanes totaling a pavement width of 57'. The existing 10' wide sidewalks along the storefronts provide limited opportunities for pedestrian gathering or stopping, and the shared-lane bicycle treatment is daunting for most bicycle riders given the lack of traffic calming elements along the corridor. Street trees are sporadic, and no other consistent pedestrian amenities exist.

OPPORTUNITIES

With an available width of 77' for the public realm and only 20' currently dedicated to non-motorists and community amenities, this section of Great Plain Avenue is ripe for a transformation to meet the needs of the entire community. Our vision propose to eliminate 2 of the 4 travel lanes to provide bicycle facilities and various streetscape and landscape elements.

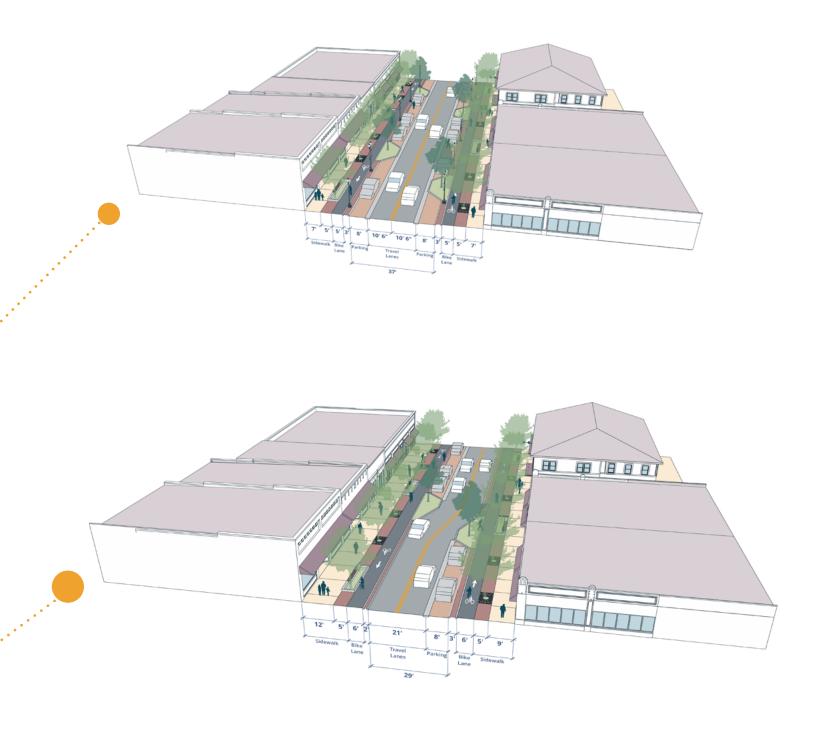
HIGH-LEVEL INTERVENTIONS

Our vision utilizes dedicated bicycle facilities (shown here as sidewalk-level bicycle lanes) and various pedestrian amenities, such as benches & decorative lighting, to encourage foot traffic and provide increased comfort and safety to non-motorists.

Traffic calming is achieved by reducing the paved width from 57' to 21'. Two parking lanes are provided to provide continued access to abutting businesses, but the pavement footprint is visually narrowed through the use of raised parking lanes. Nature and sustainability are weaved into the design through permeable pavers, a consistent tree canopy along both sides of the corridor, and pocket rain gardens along the parking lanes.

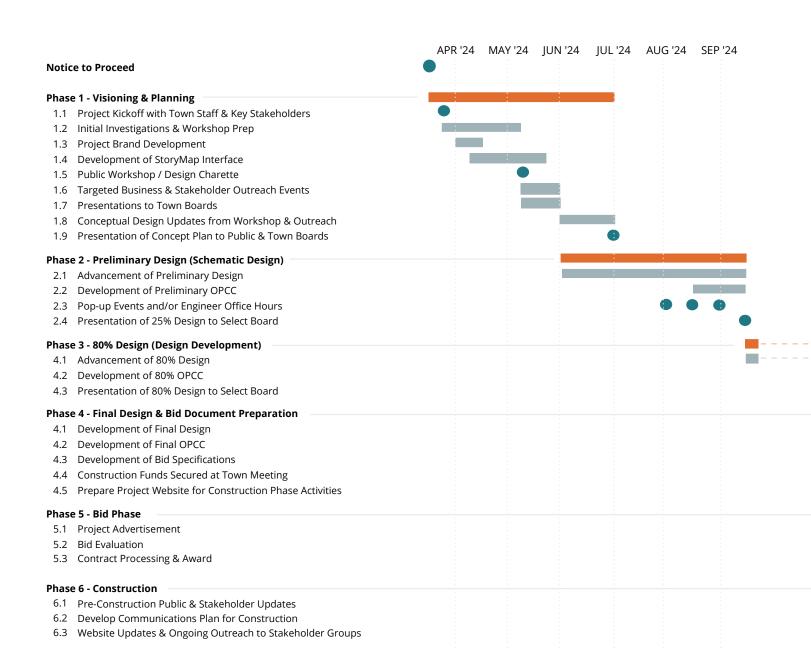
A **BOLDER** VISION

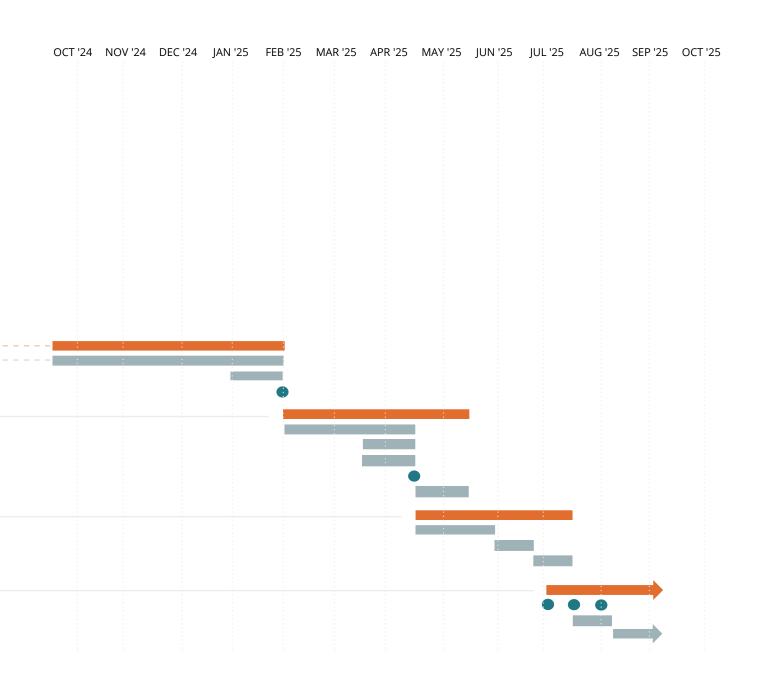
Eliminating one of the parking lanes allows for wider sidewalks and the introduction of a chicane to further calm traffic along this community-oriented downtown corridor.



PROPOSED PROJECT SCHEDULE

Based on the schedule specified in the RFQ, we have developed this detailed project schedule identifying milestones and potential engagement activities. We will work in collaboration with Town representatives to modify this schedule as needed.





PROJECT APPROACH SUMMARY

In summary, our team is prepared to:

Lead an extensive, inclusive public outreach and engagement process to ensure key stakeholders, business owners, and residents have the opportunity to provide input into future enhancements along the corridor.

Create a vibrant, welcoming streetscape that maintains and celebrates the character and cultural history of the neighborhood while also enhancing the identity and social cohesion of the downtown through incorporating diverse plantings, bike amenities, wayfinding, and seating, among other elements.

Facilitate the incorporation of public art into the re-envisioned corridor by engaging sectors of the community, local artists, businesses, and other stakeholders, effectively maintaining and building the social and cultural connection between the neighborhood and community space.

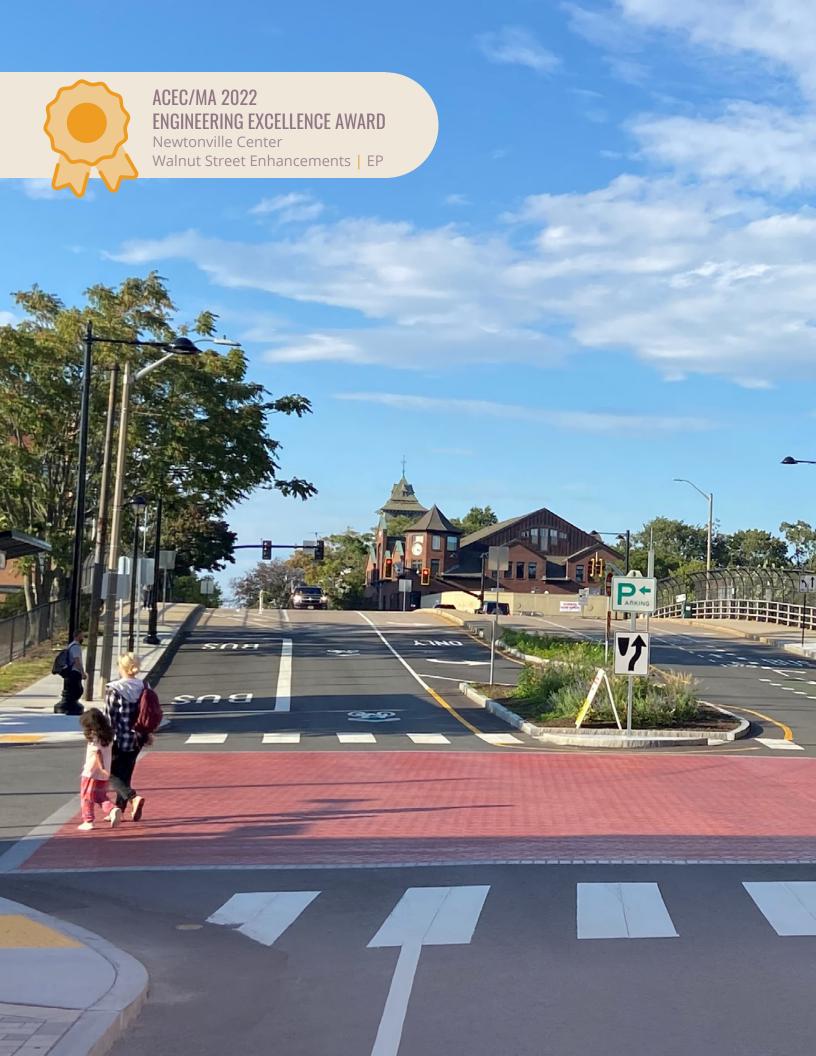
Incorporate diverse, sustainable, and maintainable stormwater green infrastructure solutions to help the Town comply with phosphorus reduction targets.

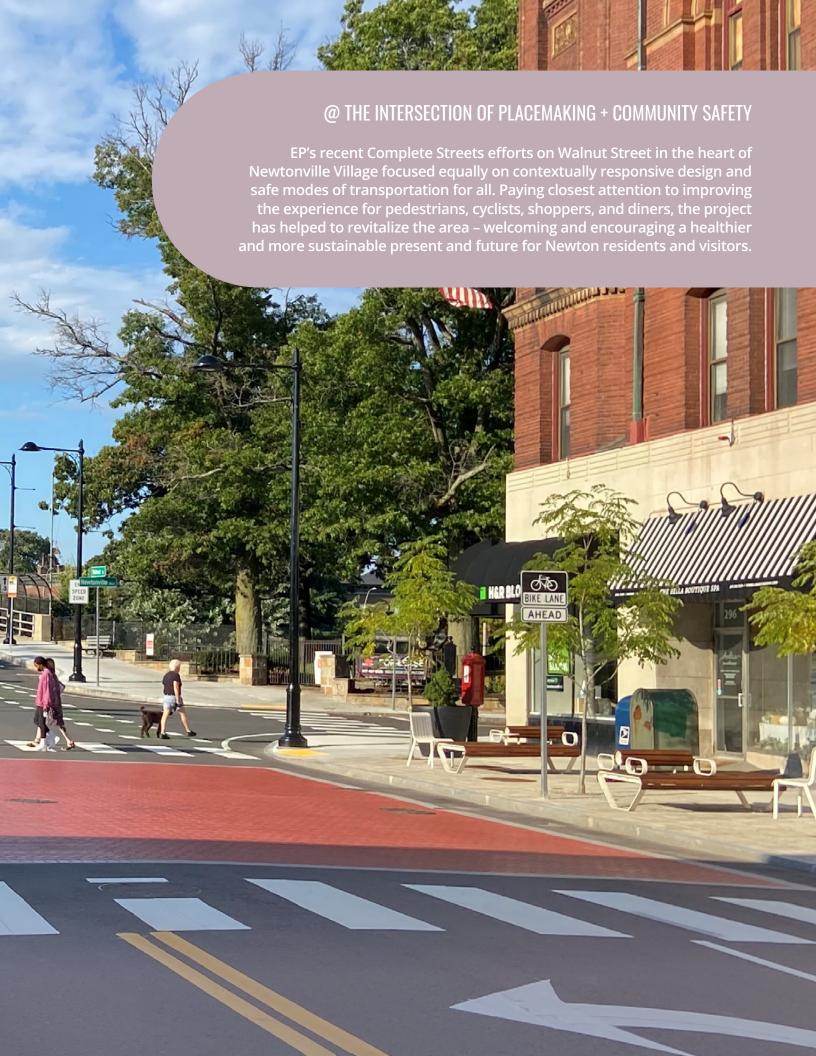
Design thoughtful and effective traffic calming measures to reduce travel speeds and provide visual cues that the Town Center is designed for users of all ages and abilities, regardless of travel mode. .

Improve comfort, convenience, and safety for people walking, rolling, and biking within and through the corridor through wider sidewalks, accessible accommodations, reduced crossing distances, and protected bicycle facilities.

Collaborate with Town officials throughout the visioning, design, and construction phases to effectively gain input and support for the community vision and ensure a seamless transition through the various phases until project completion.

APPENDIX A QUALIFICATIONS





NEWTONVILLE CENTER - REIMAGINING OF WALNUT ST.



Newton, MA

Street Redesign + Complete Streets + Placemaking + Traffic Calming

EP assisted the City of Newton in a \$5 million roadway improvement project along Walnut Street in the heart of Newtonville Village to create a "Complete Street". The project covered a distance of approximately 2,200 linear feet (0.4 miles) in Newtonville Center from Newtonville Avenue to Newton North High School, and focused on a re-balance of multi-modal accommodations, place making, and safety improvements.

EP's support for The City also included an extensive public outreach process involving residents, business owners, city officials, and boards to determine the proper balance between all modes of transportation. Extensive traffic evaluations and an alternatives analysis were conducted, and several alternatives were conceptually designed for public consumption.





With the goal of reducing travel speeds and improving safety for pedestrians within the Village Center, treatments included wider sidewalks with roadway narrowing, geometric improvements and altered traffic circulation to address a significant crash history, traffic signals, and a combination of bicycle lanes and "sharrow" pavement markings. Selected traffic calming devices include curb extensions, gateway treatments, roadway narrowing, and textured pavements.

The design included substantial geometry and grading alterations, drainage system enhancements, streetscape, landscape, street lighting, Traffic Management, roadway pavement reconstruction, and ADA compliance. The project also included the preparation of bid documents including plans, construction estimates and specifications as well as bid and construction phase services.





ACEC/MA 2021 ENGINEERING EXCELLENCE AWARD

Dedham Street
Operational & Safety Improvements | EP





ADDRESSING GRIDLOCK BETWEEN NAHANTON + BROOKLINE ST

With traffic volumes of up to 2,500 vehicles per hour, this corridor experienced major congestion that was further complicated by an adjacent fire station and college campus. Through an extensive public process and the appropriate combination of the latest technology and traffic treatments, EP resolved consistent gridlock congestion along Dedham Street and provided a more livable street for residents, with minimal impacts to abutters.



DEDHAM ST. IMPROVEMENTS - NAHANTON + BROOKLINE



Traffic Calming + Safety Improvements



The Dedham Street intersections between Brookline Street and Nahanton Street faced extreme traffic and significant safety concerns for all modes of transportation. Serving as a major connection hub for residents, commuters, commercial routes, and the MBTA bus system, this intersection is critical to those getting to and from Route 9, I-95, Brookline, and Chestnut Hill in addition to destinations within Newton.

Providing safe and efficient traffic operations for thousands of turning motorists funneling through a 650foot segment of road, while avoiding impacts to abutters, required innovative design strategies including:

- 1. The intersection was reconfigured to eliminate the need for unsignalized left turns to cut in between queued vehicles. A closed loop traffic signal system was designed for this intersection as well as the fire station driveway to maintain fully-actuated signal control to respond to ongoing shifts in the traffic pattern.
- 2. By tightening the intersection geometry and providing a truck-mountable apron, travel speeds for the major right turn movements are reduced and pedestrian safety at the proposed crosswalks is enhanced.





- 3. Green space was returned to the neighborhood with the reconfigured intersection reducing stormwater burdens and making a more efficient use of the roadway pavement.
- 4. Emergency Vehicle Hybrid Beacons and an emergency pre-emption system were integrated into the closed-loop system to allow emergency vehicles exiting the Fire Station to clear traffic and exit either intersection, thus eliminating the challenge of navigating traffic congestion and safely reducing emergency reaction time.
- 5. Complete realignment of Carlson Avenue (which provides access to Mount Ida Campus) to eliminate the former offset approaches that had created grid-lock and turned motorists through queued vehicles into oncoming traffic. A fully actuated traffic signal installation was designed as part of a closed loop system with the fire station driveway and the Nahanton Street intersection.

6. Relocated green space for the Mount Ida gateway and shorter pedestrian crossings have been provided.

Using state-of-the-art accommodations allowed EP to make efficient use of the precious right-of-way width and achieve goals of improving both pedestrian crossings and vehicle operations, while increasing both green space and vehicular capacity.

FREE LIBRARY PARKING LOT IMPROVEMENTS



Newton, MA

Green Infrastructure + Sustainable Solutions



The City of Newton retained EP for the reconstruction of the Free Library parking lot in order to increase parking, provide ADA compliance, and improve stormwater accommodations. This project incorporates highly sustainable design elements including an innovative stormwater management. This system collects, treats, and infiltrates all stormwater generated up to the 1-inch storm, increasing infiltration, reducing peak runoff, and removing Total Suspended Solids, Phosphorus and Nitrogen loads.

The reduction in phosphorus loading helps the City of Newton meet their phosphorus reduction targets set by the Massachusetts Small Municipal Separate Storm Sewer System Permit. Pervious pavement systems are utilized in the parking areas to help reduce stormwater runoff.

The project involves evaluating the existing conditions, identifying alternatives for improvements, advancing the selected preferred alternative to the Preliminary and Final Design phases, preparing bid documents, and assistance in the bid and construction phases.

The improvements include parking lot reconstruction, increasing the number of parking spaces, and laying out parking spaces for ADA compliance, new pavement markings and signs, and drainage improvements.

TRANSPORTATION NETWORK IMPROVEMENTS PROGRAM



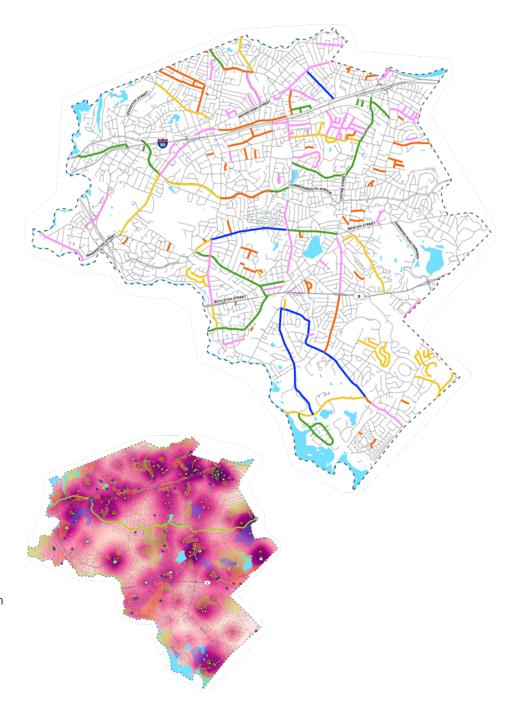
Infrastructure + Transportation

The City of Newton retained Environmental Partners (EP) in 2020 to assist with the management and oversight of their Transportation Network Improvement Program. This program is geared toward surface infrastructure improvements City-wide.

In 2017, City leadership conducted a survey of residents asking for input on where the City should focus tax dollars. Priority number two was the roadway network. From there, City staff led a network-wide assessment of roadway infrastructure, finding that the majority of the network was in need of rehabilitation. This led to a significant investment in resources; \$9.5M a year over the next 10-years (\$95 million).

Our work with the City includes preparation of planning level construction estimates, tracking of roadway work history, recommendations on pavement treatments and prioritizing repairs.

In addition to pavement, EP assisted the City with an inventory of their sidewalk network. The inventory was conducted by City staff while EP provided oversight and training for field staff. Currently, we are working with the City to compile and report on the data.

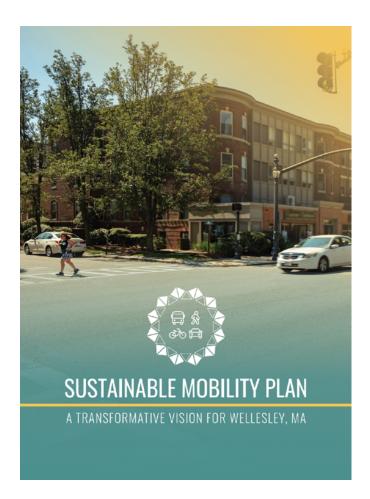


SUSTAINABLE MOBILITY PLAN



Wellesley, MA

Sustainable Innovation + Public Communications







EP was retained by the Town to develop a SMP that provides a transformative vision for the future of transportation in Wellesley that is informed by data analysis, demographic trends and forecasts, existing and increasing climate change issues, existing infrastructure needs, and national/regional best practices.

The Town's vision focuses on shifting transportation patterns for Wellesley residents, employers, and visitors away from single-occupancy gas-powered vehicles and toward lower-emissions alternatives, including walking, bicycling, transit, and electric vehicles, with the ultimate goals of reducing the Town's greenhouse gas emissions and providing increased access to Town and regional destinations.

Additional goals include increasing safety for all travel modes and providing transportation options for all users regardless of age or income. The SMP includes three main elements:

- Data review and analysis of existing conditions
- Establishing a vision for the future of the transportation system, with a focus on reducing GHG emissions and vehicular use
- Developing an implementation strategy for achieving the Town's vision

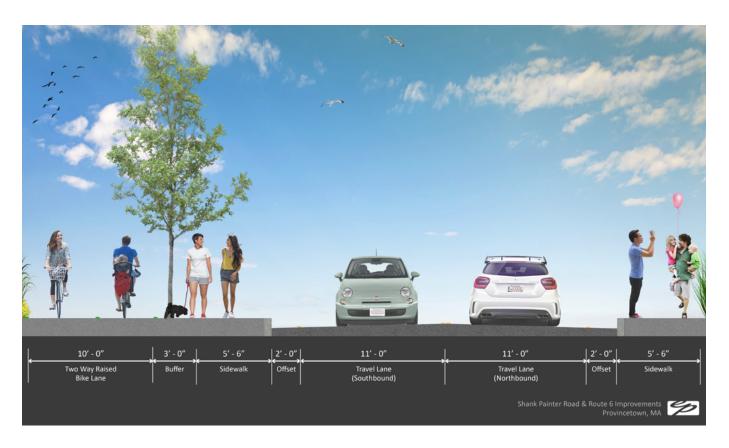
EP's tasks have included extensive public outreach and stakeholder engagement, data collection and assessment, development of transportation strategies and evaluation criteria, identification of funding opportunities, and development of an implementation plan/narrative including graphic design of the document for the public.

COMPLETE STREETS PROJECTS



❤ Various Communities, MA

Multimodal Accommodations + Funding Support



Complete Streets initiatives and multi-modal improvements promote safe, comfortable, and accessible accommodations for all users, fostering livable communities that thrive.

At the forefront of Complete Streets treatments and funding opportunities, EP has worked to improve communities throughout New England including supporting MassDOT Complete Streets funding processes and identifying the appropriate treatments for each condition and setting.

EP assists municipal clients through each Tier of the Complete Streets Funding process, in most cases resulting in awarded construction funds. Thorough Prioritization Plans prepared by EP have not only proven to be effective for funding purposes but also as a planning tool for the municipality in addressing gaps in accommodations and identifying effective safety improvements.

EP's design of Complete Streets treatments is focused on balance and stresses a high level of collaboration, which has proven to open communications between departments and boards within municipalities and with the public, allowing for the implementation of a cohesive plan that satisfies all stakeholders.

From feasibility studies to conceptual design to acquiring MassDOT funding and through complete construction, EP has supported over a dozen Massachusetts communities with Complete Streets efforts.

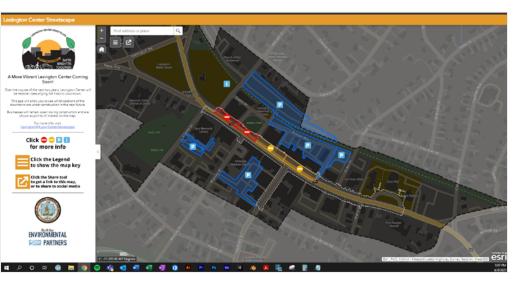
Addressing policy adaptation is no easy task and significant planning, patience, and public engagement, and EP has helped the following MA municipalities with these efforts including Newton, Lynnfield, Hanson, Dedham, Whitman, Wrentham, Somerset, Provincetown, Marshfield, and Barnstable.

LEXINGTON STREETSCAPE REVITALIZATION



Lexington, MA

Public Communications + Construction Management



The Town of Lexington entrusted Environmental Partners (EP) to manage it's transformation of the Downtown by providing Resident Engineering and Construction Management throughout the construction of the 'Center Streetscape' project. The Town, along with its design engineer, has been working through the design and public process for close to ten years. EP is providing all necessary services for the construction observation, management, coordination and administration for this exciting infrastructure project.

One of the Town's concerns heading into construction was properly communicating with its residents and direct abutters to minimize impacts of construction activities. EP worked with the Town to develop a robust public outreach and communication program.

Working with their existing Lexington Streetscape logo, EP expanded and enhanced public communications throughout construction by branding the project with a recognizable color scheme and appearance. All project communications were branded in a similar manner, allowing residents and key stakeholders to easily identify when email or signage was directly linked to the project.

In addition to mailings and targeted email blasts. EP worked with the client to create an interactive and consistently updated construction website (left), public meetings collateral, window and sandwich board posters for adjacent businesses, and business cards for our Resident Engineer. These efforts have proven to not only enhance the construction experience for the Lexington community, but have also encouraged consistent participation and excitement - even through the pandemic!

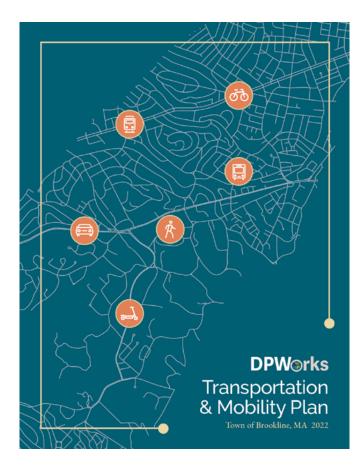




TRANSPORTATION + MOBILITY PLAN



Mobility + Public Communications



The Town of Brookline retained Environmental Partners to provide Asset Management and Capital Planning services. As the project evolved, Town leadership realized that a comprehensive plan was needed to guide the Town in prioritizing surface infrastructure projects now and into the future.

The Transportation & Mobility Plan provides a framework for prioritizing transportation projects based on the needs and long-term transportation network goals of the Brookline community. This document will continue to evolve and will be the basis for the Town to make informed decisions when prioritizing transportation infrastructure improvements with the goal of better serving the needs of all users.



The plan's primary goals are to:

- Document and track the conditions of the Town's transportation infrastructure clearly,
- Establish benchmarks and coordinate transportation infrastructure improvements to leverage available funding in an efficient manner that will benefit all users,
- Define the process by which roadway network improvements are identified and prioritized,
- Educate the community regarding the importance of pavement maintenance strategies and how they can be properly utilized,
- Create realistic budget scenarios to meet the Town's desired level of service for all roadway infrastructure.

The document is designed to provide consumers with takeaways such as the plan's synergies with pre-existing policies and programs, an overview of current-day transportation infrastructure conditions, and an understanding of how infrastructure projects are being prioritized now and how prioritization may be considered in the future. EP continues to work with the Town as this project evolves.

CITY-WIDE ROADWAY RESTORATION



Lawrence, Andover, & North Andover, MA

Traffic Calming + Safety Improvements



EP was retained to assist the Merrimack Valley communities in the aftermath of the gas explosions of September 2018.

EP acted as the Owner's Project Managers for all three communities to monitor, track and document all reconstruction efforts, and to safeguard their vital infrastructure systems - specifically water, sewer, stormwater, and roads and sidewalks.

Five-and-a-half weeks after the emergency events, construction on utility restoration was complete and most residents and businesses had heat, hot water, and functioning gas appliances before the onset of more severe winter weather.

As a result of this construction, extensive trenches were cut through much of each municipality's roadways. The EP Team worked collaboratively with each of the three municipalities in establishing customized construction budgets to return their roadways and sidewalks to their former condition.

Work varied from municipality to municipality but in general, took into consideration roadway segments impacted, their former pavement condition and width, roadway significance and traffic, the number and frequency of trenches impacting sidewalks, and providing accommodations that comply with the Americans with Disabilities Act (ADA) requirements.





EP assisted with preparing a variety of color-coded graphics and maps identifying current conditions, deficiencies/impacts, proposed treatments, and needs. Construction budgets were prepared for a variety of alternatives for consideration based on local input in order to ultimately establish the final plan.

For Lawrence and North Andover, services continued into engineered design and bid document preparation. A series of bid documents were prepared in strategic order to address various areas of the municipalities in coordination with other construction projects and planned utility upgrades to avoid further impacts and inconvenience in the future.

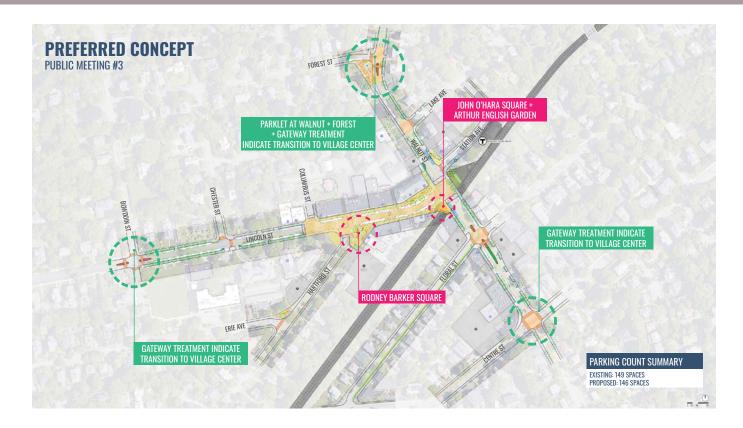
Work included a combination of full engineered design consisting of topographic survey, geometric design, and grading, and "book jobs" consisting of details, specifications, and mapping. Bid documents were prepared for advertisement. EP also assisted with Bid and Construction Phase Services including project advertising, assistance with reviewing bids, construction coordination, full time on-site representation, reviewing pay requests, and addressing questions during construction.

Throughout the process, the EP team has remained in regular contact and coordination with each municipality to ensure a smooth construction process.

NEWTON HIGHLANDS REHABILITATION



Strategic Placemaking + Safety Improvements



EP is leading the redesign of Newton Highlands Village Center to improve sidewalks and roadways for all users, with a focus on improving accessibility and safety; provide thriving community spaces for residents, businesses, and visitors; beautify the area with art, benches, lighting, and landscaping; and incorporate green infrastructure to help meet the City's phosphorus reduction targets.

Given the limited right of way within the project limits and the desire to expand streetscape amenities as well as bicycle and pedestrian infrastructure, extensive public engagement has been needed to balance competing interests and identify the best way to utilize the limited space to provide safe and comfortable facilities for all modes of transportation.

EP began this effort by performing traffic analyses to identify the operational impacts of lane change configurations and signal modifications.

The team then led the development of several conceptual design options aimed at calming traffic and enhancing the streetscape, making the Village Center a true destination for all. Options evaluated included providing on-road and separated bicycle facilities, reducing the number of on-street parking spaces, and creating a "shared" street at sidewalk level to calm traffic and provide pedestrians with the right-of-way.

Public engagement for the project has included an open house-style meeting to gather feedback on existing conditions; virtual and hybrid meetings to gather input on the conceptual design alternatives, and an on-site meeting for local business owners.

EP has worked with the City staff and stakeholders to identify a preferred concept plan and is currently advancing the preliminary design. EP will also be leading the final design, bid document preparation, and construction administration services on this project.



Conrad W. Leger PRINCIPAL



Conrad is a Principal at EP bringing over 15 years' experience in transportation design and planning, stormwater management, and the strategic oversight of infrastructure assets. His expertise lies in crafting solutions among diverse public stakeholders, ensuring projects not only meet technical benchmarks but also resonate with community aspirations. He specializes in shaping realistic capital improvement programs and assisting communities in securing essential funding. Through his leadership, Conrad has become an asset for communities in transforming infrastructure challenges into opportunities for sustainable development and community enrichment.

CERTIFICATIONS

- EIT #0T5980, NV
- FHWA-NHI-130055 Safety Inspection of In-Service Bridges

EDUCATION

 B.S. Civil Engineering, Technology Wentworth Institute of Technology

SELECT PROJECT EXPERIENCE

Public Works - Communication & Outreach

Conrad works with multiple clients on their public outreach and communication, specifically for public works infrastructure projects. His experience in presenting project findings in public settings gives him unique experience understanding the communication breakdown between municipal governments, residents and public works departments.

Conrad has provided several organizations assistance by sharing his knowledge through presentations or training events. Organizations he has worked with include APWA, Baystate Roads, CT T2 Center, RI Public Works and NH Public Works. Most recently, he has conducted a series of Pavement Management Bootcamp (through Baystate Roads and CT T2 Center) to educate road manager on the process and benefits of implementing a pavement management program.

Pavement Management

Conrad is well versed in pavement management methodologies, working in more than 100 communities throughout Massachusetts, Rhode Island, Connecticut, Maine and New Hampshire. He brings a wealth of knowledge regarding pavement repair techniques; information he has gathered from attending multiple paving conferences across the country and working with industry experts in New England and beyond. In an effort to understand the life expectancy of these treatments, he has also conducted case studies to monitor the performance of these repair techniques over time. Conrad specializes in the optimization of short and long term capital plans, candidate selection for repair techniques, and presenting study findings in public forums.

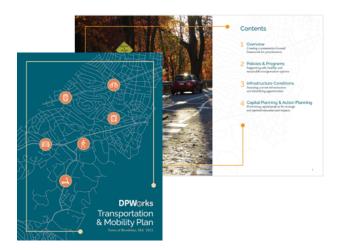
ADA Planning

Conrad has worked with several communities in meeting the requirements set forth by the Americans with Disabilities Act (ADA) regarding right-of-way assets. These projects are geared toward gaining an understanding of a municipality's existing ADA infrastructure and policies, making improvements on policies and developing a long-term plan for repairing/replacing this infrastructure. Conrad oversees field inspections to ensure attribute information is being collected consistently and develops customized prioritization methodologies for each of these communities.



Transportation Network Improvement Program | Newton, MA

The project includes focuses on a re-balance of multi-modal accommodations, place making and safety improvements. Work included an extensive public outreach process involving residents, business owners, city officials and boards to determine the proper balance between vehicular, pedestrian, bicycle and transit users. Several alternatives were conceptually designed for public consumption.



Transportation & Mobility Plan | Brookline, MA

Brookline's Transportation and Mobility Plan is a town wide, planning and prioritization document developed to guide funding and capital improvement decisions that help protect and improve municipal transportation infrastructure in a predictable, transparent and cost-effective manner. The document was developed to provides a framework for long-term transportation network goals for the Brookline community.



Lexington | Lexington, MA

In order to address poor lane configurations, offset approaches to intersections, outdated signalization without coordination, and lacking pedestrian accommodations, EP designed substantial intersection realignment in addition to improving pedestrian sidewalks and crossings, and bicycle detection and markings.



DPW Public Relations & Branding Support Gloucester, MA

EP worked with the City of Gloucester DPW on launching an enhanced public outreach program designed to boost public support and staff morale. EP crafted an action plan, brand guidelines, and templates to encourage consistent branding and messaging while simultaneous lessening the burden of content creation. The result has been more engagement on social media, a boost staff morale and a general excitement about the work they are completing.



Margot E. Schoenfelder PE, AICP

PROJECT MANAGER



Margot is a Project Manager at Environmental Partners with 13 years of diverse experience for municipalities and state agencies. Her experience is focused on safe and comfortable pedestrian and bicycle facilities, urban roadways, ADA & PROWAG compliance. Her experience also includes municipality-wide initiatives to promote non-motorized travel and increase safety for all modes through infrastructure investments and policy/program changes. Her education and professional experience in both planning and engineering allows her to "bridge the gap" between the two disciplines and take on various roles within and across projects.

CERTIFICATIONS

- Professional Engineer (Civil) #53582 MA #042124 NC #17735 NH #36898 CT #14857 RI #18112 ME
- American Institute of Certified Planners (AICP) #029166

EDUCATION

- M.S., Transportation Engineering, University of California at Berkeley
- Masters of City Planning, University of California at Berkeley
- B.S., Civil Engineering, Massachusetts Institute of Technology
- B.S., Urban Studies and Planning, Massachusetts Institute of Technology

SELECT PROJECT EXPERIENCE

Newton Highlands Village Rehabilitation Project Newton, MA Margot serves as the Project Manager for EP's efforts in assisting the City of Newton with the reconstruction of Walnut Street and Lincoln Street through the Newton Highlands Village Center. The project will incorporate a road diet, various traffic calming features, and welcoming streetscape & landscape elements to make the center a comfortable and engaging destination for residents and visitors alike. Margot led the public engagement and conceptual design for this project and is currently progressing the preliminary design. This project is slated to be constructed in FY 2025.

MassDOT, Route 28/Route 38
Planning Study Somerville, MA*
Margot was the Project Engineer
for a planning and mobility study
surrounding the intersection of
McGrath Highway and Mystic Avenue.
This area is a juxtaposition of quiet,
dense neighborhood streets with
high bicycle and pedestrian activity
and auto-oriented major roadways.
The area is bordered by significant
traffic generators and destinations
that encourage bicycle and
pedestrian traffic.

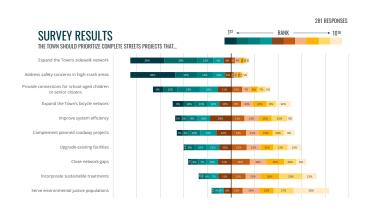
However, effectively navigating these auto-oriented areas on foot or by bicycle is challenging. The project aimed to identify and evaluate opportunities to improve multimodal connectivity in the study area for advancement into design.

Boston Properties, Third Avenue Interchange Improvements Waltham, MA*

Third Avenue is a thriving area for office, research & development, and retail uses but experiences significant congestion during peak hours due to outdated infrastructure. Margot served as the Deputy Project Manager of the design team tasked with reconfiguring the I-95 NB on- and off-ramps adjacent to Third Avenue and widening the local adjacent roadways to better accommodate the current and projected traffic in the area. As Deputy Project Manager for the project, Margot coordinated extensively with the client, MassDOT, the City of Waltham, subconsultants, and the design team to bring the design from the conceptual phase through to construction with an accelerated design schedule.

^{*} Project completed prior to joining EP

HIGHLIGHTED PROJECTS



Active Transportation Plan | Andover, MA

Margot is leading the development of a town-wide Active Transportation plan for Andover to strategically invest in & provide facilities for walking, rolling, and bicycling throughout the community. The project has included extensive in-person public engagement to generate enthusiasm for the effort, understand the community's preferences for new facilities, and identify prioritization criteria. The final Active Transportation Plan will be published in Spring 2024.



Guardrail Design, Various Locations Needham, MA

Margot served as the Project Manager for the design of crashworthy guardrail along segments of Central Avenue, Dedham Avenue, and Farley Pond Lane in Needham. The team produced plans, opinions of probable construction cost, and bid documents for the Town to advertise the project, with the low bid coming in within 5% of the estimated cost.



Sustainable Mobility Plan | Wellesley, MA

Margot led the development of a SMP that provides an actionable framework for reducing GHG emissions from transportation by improving people's ability to move around effectively in a sustainable manner using a variety of "low-impact" travel modes. EP's tasks included data assessment, developing GHG reduction concepts, public outreach and stakeholder engagement, identifying funding concepts, and developing an implementation plan.



Massachusetts Avenue Sidewalk Reconstruction and Broadway Plaza Redesign | Arlington, MA*

Margot served as the Project Manager of a project involving the replacement of existing brick sidewalks along Mass Avenue and Broadway in Arlington with cement concrete sidewalks an ADA-compliant pedestrian curb ramps as well as the redesign of Broadway Plaza to better utilize the existing plaza footprint and promote a sense of place. Margot facilitated a public outreach meeting to gather public input on the sidewalk and plaza design and coordinated extensively with the Town's Planning and Public Works Depts to establish a design that was safe for all users, visually appealing, and cost effective.



Scott D. Turner PE, AICP, LEED AP ND RESILIENT INFRASTRUCTURE LEAD



Scott is the Director of Planning at Environmental Partners with 30+ years of experience in Civil Engineering, Planning, and Stormwater Management. He is a registered professional engineer, member of the American Institute of Certified Planners and LEED Accredited Professional in Neighborhood Development. He specializes in Site Development, Permitting, Green Infrastructure Design, and Resilience. His diverse project experience includes managing and directing complex land development, green infrastructure, and resilience projects.

CERTIFICATIONS

Professional Engineer

Civil: MA #41775 Civil: NH #15065

Civil: NI #24GE04972900

Civil: NY #086190-1 Civil: PA #PE0079901

 American Institute of Certified Planners, #017479

- LEED Accredited Professional Neighborhood Development
- OSHA (10-hour) Certified

EDUCATION

- M.S., City Planning, Georgia Institute of Technology
- B.S., Civil Engineering and Environmental Studies, Tufts University

ASSOCIATIONS

APA Board of Directors; Region 1
 APA Sustainable Communities
 Division Chair, 2014-2017

SELECT PROJECT EXPERIENCE

DC Water, Kennedy Street Green Infrastructure Streetscape Challenge* Washington, DC Senior Project Manager leading a multi-discipline team to design a highperformance streetscape sustainable stormwater retrofit that can serve as a model for other locations. The Kennedy Street project includes a variety of innovative strategies that retain and detain stormwater. Managed team for the design of inter-connected green infrastructure strategies along the entire length of the street that create a long, slowpath for stormwater to travel, thereby managing (treating and detaining) a much larger contributing drainage area than the street itself. Designed a number of complete street concepts, including roadway sharrows and stormwater curb extensions that will serve as traffic calming measures and narrow pedestrian crossings. The concept design was completed as part of an international design competition.

DC Water Clean Rivers Project, Rock Creek A Green Infrastructure* Washington, DC

Senior Project Manager, Design Manager, and Engineer of Record for the design of 57 green infrastructure facilities throughout the District including 36 planter bioretention facilities, four curb extension bioretention facilities, 9 alley permeable pavement facilities, and eight parking lane permeable pavement facilities. The designbuild project is the first large scale implementation of green infrastructure in Washington, DC. It is necessary for DC Water's compliance with the long-term control plan to reduce combined sewer overflow (CSO) discharges from the City's sewer system to Rock Creek.

HIGHLIGHTED PROJECTS



Sustainable Mobility Plan | Wellesley, MA

Planning and Implementation Lead for the development of a 5-10 year SMP that addresses and enhances the use of current and alternative modes of transportation in Wellesley with the ultimate goal of reducing the Town's greenhouse gas emissions by 25%. EP's tasks include data assessment, developing GHG reduction concepts, extensive public outreach and stakeholder engagement, identifying funding concepts, and developing and implementation plan.



Resilient Open Space Concepts for Boston Harbor* | Boston, MA

Senior Project Manager responsible for providing advisory services regarding the development of imagery and highlighting of potential projects and project locations within the City of Boston to protect the City from Climate Change impacts including sea level rise and storm surge.



Free Library Parking Lot | Newton, MA

The City of Newton retained EP for the reconstruction of the Free Library parking lot. The improvements include parking lot reconstruction, increasing the number of parking spaces, and laying out parking spaces for ADA compliance, and drainage improvements. Scott led the implementation of various green infrastructure strategies including porous pavements, bioretention basins, and an innovative underground infiltration facilities that collects, treats, and infiltrates the first inch of rainwater.



Moakley Park Vision Plan* | Boston, MA

Providing technical support for the project with regard to stormwater management and Green Infrastructure design, while also supporting the teams Community Outreach and Public Participation efforts. Moakley Park is located directly adjacent to Carson Beach and provides an outstanding opportunity to incorporate Green Infrastructure solutions that protect from storm surge, sea level rise, and increased frequency of storms.

^{*} Project completed prior to joining EP



James D. Fitzgerald PE, LEED AP

ENVIRONMENTAL PARTNERS An Apex Company —

TRANSPORTATION DESIGN LEAD

Jim is the Director of Transportation and a Principal at EP with almost 30 years of experience in a wide variety of Traffic & Transportation projects for numerous municipalities, MassDOT, and private sector clients. His experience includes performing and overseeing all areas of Transportation Engineering from in-depth transportation/traffic studies to peer reviews, from downtown urban design to scenic rural corridors, from optimizing travel times to traffic calming, and from public hearings to expert testimony. He is passionate about transforming roadways from vehicle-centric to "livable streets" with a focus on comfortable Complete Streets treatments and promoting thriving communities.

CERTIFICATIONS

- Professional Engineer (Traffic) #45028, MA
- Leadership in Energy and Environmental Design (LEED) Accredited Professional (AP)

EDUCATION

- B.S., Civil Engineering, University of Notre Dame
- B.A., Engineering, Physics Minor, Stonehill College

SELECT PROJECT EXPERIENCE

Washington Street Newton. MA

Project Manager for concept development phase of transformative Complete Streets project that promotes comfortable bicycle, pedestrian and transit use including traffic evaluations of redirected circulation in combination with road diet.

Reconstruction of Shank Painter Road and Route 6

Provincetown, MA Jim is the Project Manager of a transformative project that will substantially change the Town's Transportation network through providing safe and comfortable pedestrian connections between the heavily populated southern portion of town and the trails, parks and beaches to the north. The project involves a road diet of Route 6 to provide a shared use path for bicycles and pedestrians while maintaining vehicular traffic. Shank Painter Road is to be provided buffered bicvcle lanes and conventional sidewalks. A roundabout is designed where the two roads intersect. The project involved a substantial public outreach process and submission through MassDOT as a TIP project.

Dedham Street Improvements Newton, MA

Principal in Charge for a project addressing poor alignment, substandard lane configurations, outdated signalization, and lacking pedestrian accommodations resulting in grid lock and safety concerns. EP designed substantial intersection realignment in addition to improving pedestrian sidewalks and crossings, and bicycle detection and markings.

City-Wide Transportation Improvements

Lawrence, MA Project Manager assisting the City with addressing the substantial impacts to roadways and sidewalks in addressing the gas explosions in 2018 that impacted much of the city. Project involves citywide improvements to roadways and sidewalks including design, multiple bid documents, and budgeting services in addressing much of the city's infrastructure including city-wide improvements to pedestrian accommodations, traffic calming amenities, and geometric improvements.

HIGHLIGHTED PROJECTS



Walnut Street Enhancements | Newton, MA

The project included a re-balance of multi-modal accommodations in the heart of Newtonville, prioritizing bicycle, pedestrian and transit users and slowing vehicular travel speeds by substantially narrowing the road in the commercial area. Landscape and streetscape enhancements were provided in creating outdoor living rooms. Work included an extensive public outreach process to gain consensus on the proper balance between users.



Brant Rock Multi-Modal Improvements
Marshfield, MA

Jim is the Project Manager providing professional engineering services associated with improvements throughout Brant Rock, along Ocean Street from Dyke Road to Island Street. Work includes improvements to traffic circulation, parking accommodations, pedestrian and bicycle facilities and streetscape enhancements in The Village Center. Geometric improvements and a roundabout are bring proposed to improve safety for all users.



Barnstable Village Improvements | Barnstable, MA

Jim was the Project Manager of Complete Streets oriented design for Main Street (Route 6A) corridor and for Millway providing connections to Barnstable Harbor. The design focused on safe multi-modal accommodations and creating a village identity with thematic elements that link the Village to the waterfront and treatments that promote a walkable village. The project balanced addressing poor geometry, extreme traffic congestion, and substandard pedestrian amenities.



Complete Streets | Various Communities, MA

Providing guidance to numerous municipalities throughout the Commonwealth, navigating them through the Complete Streets three-tier process. For each community, work included identifying safe and comfortable accommodations for bicycles and pedestrians and transforming vehicle-centric corridors to complete streets.



Cassandra A. Thompson

COMMUNICATIONS, BRANDING, + GRAPHIC DESIGN



An award winning designer and artist, Cassandra is the Brand and Communications Manager at Environmental Partners. With a combined 15 years of experience in the art, design, and AEC industries, she leads design and production of visual materials to support internal and external needs including branding, communications, social media campaigns, renderings, plans, and 3D models, ensuring communities and stakeholders are engaged and informed through all phases of work.

EDUCATION

 Bachelor of Fine Arts with Departmental Honors, Architecture, Massachusetts College of Art and Design

PROFESSIONAL AFFILIATIONS

- Harvard Graduate School of Design, Black in Design Conference - Branding & Social Media Consultant to the AASU 2018 - 2019
- Massachusetts College of Art and Design, Senior Degree Project Advisor and Critic, 2013 – Present

SELECT AWARDS

- Society for Marketing Professionals Services (SMPS) Boston Annual Awards, 1st Place in Corporate Identity, 2020
- Society for Marketing Professionals Services (SMPS) Boston Annual Awards, 2nd Place in Website Design, 2020
- Hermes Creative Awards, Gold Award in Print Media – Company Branding, 2020
- Hermes Creative Awards, Gold Award in Print Media Design of Overall Publication, 2019
- Hermes Creative Awards, Gold Award in Print Media Publications in the Category of Awards Submissions, 2019

SELECT PROJECT EXPERIENCE

Beaver Street Interceptor Project

ranklin. MA

Cassandra is Design Lead for EP's ongoing DPW Public Relations & Branding Support for the Town of Franklin. Creating a custom logo and graphic standards, she supports construction communications for Public Works to lessen the burden of content creation to keep the community informed and engaged.

Climate Action Plan

Milton, MA

Design Lead for the Climate Action Plan for Milton, MA, Cassandra partnered with the technical team at Apex to create a project identity and logo. The Team provided the Town with custom icons, templates, and graphic guidelines to ensure that future communications and publications from the Town are consistent and recognizable to the community.

Street Section Rendering

Shank Painter Road & Route 6 Improvements Provincetown, MA

Cassandra created a rendered section highlighting the harmony between all modes of travel and intentionally reflecting the diversity and celebratory spirit Provincetown is famous for to effectively communicate EP's plans to all stakeholders.

Site & Tank Rendering

Massapoag Avenue Water Tank Replacement Sharon, MA

Addressing community concerns and needs, Cassandra created 2 renderings - the first communicating what EP's new tank and amended site would look like including immediately after construction and the second after 15 years of predicted tree growth.

Street Section Rendering

Main Street Improvements Tisbury, MA

Looking for a way to convey to Tisbury residents and business owners the significant aesthetic and safety impact the bump-outs will have, Cassandra recreated the existing block 3-deminsionally in order to provide 2 comparative street section renderings, one showing a pedestrian crossing in the existing crosswalk, and the other showing the pedestrian at the proposed bump-outs.

Conceptual Building & Site Rendering

Tri-Town Regional Water Treatment Plant Braintree, Randolph, and Holbrook, MA

Cassandra created an exterior 3-dimensional model of the proposed building and site and site rendering to be used for community outreach and communications for stakeholders as part of EP's OPM role.

HIGHLIGHTED PROJECTS



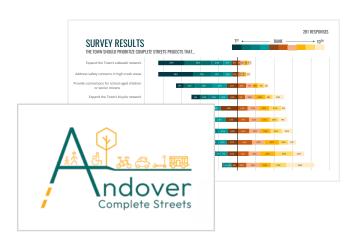
Sustainable Mobility Plan | Wellesley, MA

Conceptualizing and creating custom graphics, Cassandra supported the technical team after development of a SMP that provides an actionable framework for reducing GHG emissionsfor the Town of Wellesley, MA. She brought the SMP document to the highest graphics standards winning a coveted Platinum Hermes Creative Award in 2022 for the graphic design and layout of this document.



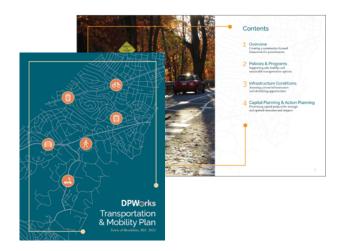
Lexington Center Streetscape Public Communications + Graphics | Lexington, MA

Utilizing their existing logo as a catalyst, Cassandra is supporting the Town of Lexington and their Streetscape project currently under construction with signage and communications. Expanded and further defining the project's brand, she provided public outreach documents, digital assets, and templates for the Town to print, post, share, and even update as work progresses.



Active Transportation Plan | Andover, MA

Creating a custom logo and graphic guidelines, Cassandra supported the Town of Andover on their mission to ensure that public communications are consistent and recognizable as they work on their Active Transportation Plan, highlighting Complete Streets efforts.



Transportation & Mobility Plan | Brookline, MA

Brookline's Transportation and Mobility Plan is a town wide, planning and prioritization document developed to guide funding and capital improvement decisions that help protect and improve municipal transportation infrastructure in a predictable, transparent and cost-effective manner. The document was developed to provides a framework for long-term transportation network goals for the Brookline community.



Jane R. Davis



TRAFFIC DESIGN

Jane is a Project Manager at Environmental Partners with over 15 years of experience in Traffic and Transportation Engineering. She specializes in traffic analysis, with experience in highway design and construction engineering for both public agencies and private civil engineering firms. Her project experience includes analysis and design associated with public improvement projects, private development, and school renovations/relocations in Massachusetts and New York

CERTIFICATIONS

 Professional Engineer (Civil) #52643, MA

EDUCATION

- B.S., Civil Engineering, McGill University, Montreal, QC
- Concentration in transportation engineering & structural design including: Traffic Engineering, Steel Structures Design, Concrete Structures Design, Infrastructure Renovation/ Preservation, and Hydraulic Structures

SELECT PROJECT EXPERIENCE

Dedham Street Intersection Newton, MA

Project Manager to address a challenging circulation problem through the signalized intersections along Dedham Street in Newton. Poor lane configurations, offset approaches to intersections, outdated signalization without coordination, and lacking pedestrian accommodations have contributed to high crash rates. Jane led a team that designed substantial intersection realignment. The design addressed the multiple deficiencies within a tight location while minimizing impacts to right-of-way and private utilities.

Route 6 Reconstruction

Eastham, MA

Senior Project Engineer embarking on traffic evaluation and conceptual design of the Route 6 corridor with considerations for a road diet in order to reduce travel speeds and afford comfortable bicycle and pedestrian accommodations that connect to the Cape Cod Rail Trail and surrounding destinations. Not only does Route 6 serve as the spine of Cape Cod but it also provides important access for local residents and access to a proposed Town complex.

Nahanton Street

Newton, MA
Senior Project Engineer for
improving bicycle and pedestrian
accommodations and traffic
circulation improvements along
Nahanton Street at its intersections
with Wells Ave and Winchester Street.

Brookline Village Brookline, MA

Senior Project Engineer for the rehabilitation of improved pedestrian accommodations and traffic signal upgrades including Adaptive Signal system technology in the heart of

Brookline Village. The project includes the intersections of Washington Street at Harvard Street, Kent Street, Davis Avenue, Andem Place, and Station Street.

Wrentham Center Rehabilitation

Wrentham, MA

Project Manager for project focused on reducing pavement in creating a less vehicle-centric road to improve safety for bicycles and pedestrians. The project involves a reconfiguration of surrounding roadways and intersections, shortened pedestrian crossings, addressing traffic congestion, and streetscape improvement for the local businesses.



Benny L. Hung

TRANSPORTATION DESIGN



Benny is a Senior Project Manager and an Associate at EP with over 20 years of experience in Transportation engineering and design. Community assistance is a large part of this work and Benny assists in developing Capital Improvement Plans, budgeting and funding, supporting projects through all phases, and preparing multi-modal plans including Complete Streets projects.

CERTIFICATIONS

 Professional Engineer (Civil) #46122, MA

EDUCATION

B.S., Civil Engineering, University of Massachusetts

SELECT PROJECT EXPERIENCE

Washington + Harvard Street Newton, MA

The project involved the installation of a traffic signal and curb extensions to improve safety for crossing pedestrians. EP assisted the City in securing Tier 3 funds for this, the City's first Complete Streets Funding project.

Free Library Parking Lot Newton, MA

Project Manager for the innovative parking lot rehabilitation including parking lot recirculation to improve pedestrian safety and maximize parking as well as accommodations for solar canopies and green stormwater infrastructure.

Maquan Street (Route 14)

Hanson, MA Project Manager to transform the hilly, winding corridor lacking any bicycle or pedestrian accommodations to providing a shared use path to transform the east side of Hanson, providing pedestrian and bicycle connections between several neighborhoods, schools, sports fields, and camps, creating comfortable accommodations and encouraging use with safe crossings to adjacent neighborhoods and a proposed park. The project is advancing through the MassDOT TIP process.

Hancock Street at Chestnut Street Abington, MA

Project Manager to design safety improvements at the Hancock Street at Chestnut Street intersection given the tremendous history of crashes at the location and its proximity to an Woodsdale Elementary School. The project involves the design of a roundabout at a particularly challenging topography, transitioning roadway grades for safe access and sight lines. The project is advancing through the MassDOT TIP process.

Conwell Street Bicycle Improvements

Provincetown, MA
Mr. Hung is the Senior Project
providing permitting, design, and
delivery of complete construction
documents and specifications for
the widening of approximately 700
Ft. of Conwell Street in Provincetown
to accommodate bicycle lanes and
pedestrian.

Prioritization Plan Preparation Newton, MA

Mr. Hung is the Senior Project Engineer for the preparation of the City's Prioritization Plan as part of Tier 2 requirements of the Complete Streets Funding.



Ryan P. Hayden TRANSPORTATION DESIGN



Ryan is a Project Engineer at Environmental Partners with 5 years of experience in the Traffic & Transportation and Stormwater fields. He is proficient in 3D modeling and geometric roadway layout design. Specializing in drone technology to advance project progression, his project experience includes designing closed stormwater drainage systems, roadside hazard assessment, and roadway layout and design.

CERTIFICATIONS

FAA - sUAS (Drone) Pilot #4304965

EDUCATION

 B.S., Civil & Environmental Engineering, University of Maine

SELECT PROJECT EXPERIENCE

Center Streetscape Project Lexington, MA

Project Engineer providing services required for the construction observation, management, coordination and administration of this exciting project. Work includes design a full rebuild of the sidewalks, installation of drainage, and the rebuilding of the roadway including the installation of new granite curbing as well as the adjustment of existing curbs.

Brant Rock Multi-Modal
Improvements Marshfield, MA
Project Engineer providing
professional engineering services
associated with improvements
throughout Brant Rock, along Ocean
Street from Dyke Road to Island
Street. Work includes improvements
to traffic circulation, parking
accommodations, pedestrian and
bicycle facilities and streetscape
enhancements.

Fountain Street Intersection Design Framingham, MA

Project Engineer for improvements to the Fountain Street and Dudley Road intersection. Peer reviewed the design plans and traffic analysis prepared by another consulting firm and helped prepare a conceptual plan illustrating recommended changes to the proposed design. Helping the City obtain environmental permits necessary for the construction of the project and will provide bid phase services to facilitate the project advertisement.

Reconstruction of Shank Painter Road Provincetown, MA Project Engineer to provide the design of a comprehensive rehabilitation of Shank Painter Road,

including converting the roadway to a Complete Street. Work includes designing several alternatives to present during a comprehensive public outreach program, and the engineered design of bicycle and pedestrian accommodations to accommodate the high demand during peak summer months.



Dylan J. O'Donnell

URBAN DESIGN + STORMWATER



Dylan is a Senior Project Engineer at Environmental Partners with 7 years of experience in Civil Engineering, Planning, Stormwater, and Construction Management. He specializes in the design and permitting of complex land development and stormwater projects. His experience includes due dilligence and feasibility research, land development design, permitting, and construction management in the municipal, retail, commercial, and residential sectors.

CERTIFICATIONS

 Professional Engineer (Civil) #57002, MA

EDUCATION

- B.S., Civil & Environmental Engineering, University of Massachusetts Amherst
- B.S., Kinesiology, University of Massachusetts Amherst

SELECT PROJECT EXPERIENCE

Jones River/Elm Street Stormwater Improvements Kingston, MA Conducted a comprehensive stormwater design along the Elm Street corridor to address stormwater quantity and quality discharging into the Jones River. The design included rehabilitating outdated, underperforming stormwater infrastructure and installing a collection of stormwater best management practices (BMPs) including proprietary hydrodynamic separators, drywells, an infiltration basin, and an underground infiltration chamber system. Presently completing local permitting including a Notice of Intent with Town Conservation Commission.

Free Library Sustainable Parking Lot Redevelopment Newton, MA
Continuing from conceptual design, the preliminary design and permitting efforts of the Free Library Parking
Lot redevelopment include a variety of sustainable and low impact design measures ranging from solar canopies, porous pavement, and a high performing stormwater infiltration system. The site is located in a riverfront resource area, and current permitting efforts include filing a Notice of Intent with the Newton Conservation Commission.

99 Hayden Avenue Laboratory **Building** Lexington, MA Project Engineer for the redevelopment of an existing 36 acre site. The project involves the repositioning and expansion of an existing office campus by demolishing 62,000 square feet of existing office space and constructing 416,000 square feet of new laboratory space. The project includes the construction of 496 parking spaces. The majority of these parking spaces are located in structured parking beneath the proposed buildings. EP is providing due diligence, survey, design, permitting, and construction services related to the project.

On Call Peer Review Services Freetown, MA

Provide peer review letters, attend public meetings, and correspond with developers and their engineers for the Planning Board and the Conservation Commission. Responsibilities have included conducting peer reviews for dozens of proposed projects of all kinds, such as solar fields, commercial developments, and residential subdivisions.

TOOLE

FIRM PROFILE

Toole Design is the nation's leading planning, engineering and landscape architecture firm specializing in bicycle and pedestrian transportation. Toole Design has a national reputation in transportation planning, traffic calming, pedestrian and bicycle research and facility design, trail planning and design, transit accessibility, Safe Routes to School planning and design, and a variety of other related areas.

Toole Design has an outstanding reputation for results-oriented planning. Our plans identify specific locations for improvements, set priorities for implementation, and provide initial cost estimates. More importantly, our planning process builds momentum among city and elected officials, advocates and the general public to ensure projects and programs move forward immediately upon completion, and often even before the plan is completed. Our focus is in multimodal transportation – developing cost-effective, practical transportation solutions that move people efficiently, while improving the health and quality of life of the community.

PLANNING

Since its founding, Toole Design has helped communities of all sizes transform their transportation systems. We develop bicycle, pedestrian and transit access plans that lead directly to implementation. Our planners have pioneered data collection and stakeholder engagement strategies that energize the public while providing clear, practical direction to decision makers and implementers. Our experience with applied planning strengthens our best practice research, and vice versa. Our approach builds momentum towards implementation. Our work includes:

- Bicycle and Pedestrian Plans
- Trail Master Plans and Corridor Studies
- GIS Analysis and Data Collection
- Community and Stakeholder Engagement
- National Studies and Best Practices Research
- Safe Routes to School
- Prioritization and Performance Measures
- Bike Share Feasibility and Business Plans
- Training in All Specialty Areas

ENGINEERING

Toole Design is a leader in multimodal engineering services, from producing design guidelines and construction documents to performing an array of engineering analyses. We are known for our ability to turn planning level concepts into reality. We have accomplished this on a variety of challenging transportation projects including Complete Street corridors, on-street bike facilities, shared-use paths, intersection and pedestrian safety improvements, and wayfinding sign systems. Engineering disciplines include:

- Roadway and Street Design
- Traffic Engineering
- Multimodal/Traffic Analysis
- Drainage Design
- Erosion and Sediment Control Design
- Construction Phase Services

LANDSCAPE ARCHITECTURE

Landscape Architecture is a major component in the planning and design of places for people to experience and enjoy. At Toole Design, our Landscape Architecture Practice focuses on integrating comprehensive planning and design with natural systems, and sustainable design measures to create aesthetically pleasing and livable communities. We believe that all multimodal transportation systems should be effective, safe, convenient, attractive, and work well with the existing environment. Landscape Architecture disciplines include:

- Greenway and Trail Design
- Streetscape Design
- Sustainable Design
- Park Design
- Lighting Design
- Transit Access
- Wayfinding



JAFFREY CENTER CONCEPT PLAN

JAFFREY, NH





The Toole Design Team led the visioning and concept development for multimodal access and public realm design in the Downtown area of Jaffrey, NH. Toole Design coordinated our work with a larger multi-roundabout and bridge project, ongoing through the New Hampshire DOT.

The Toole Design Team considered the historical and environmental context of the Downtown area. Historic textile mill buildings and river-power infrastructure define the character of Main Street. Combined with the natural environment of the Contoocook River and the adjacent Mount Monadnock State Park, it gives the downtown district a unique character and charm. The Monadnock Branch Rail Trail also intersects one of the proposed roundabout locations. This popular multi-use path brings many residents and visitors into the center of town.

Toole Design reviewed the proposed streetscape design and public realm spaces created by the proposed roundabout and recommended improvements to the experience of residents and visitors moving through Downtown Jaffrey. Our team visualized these enhancements in a 3D model of the downtown historic district, which was a vital tool for communicating to the client and public how our concepts could create a cohesive public realm. The team incorporated the historical features and existing materials while emphasizing the geographical and natural environment into the placemaking concepts. The project includes nine focus areas: streetscape layout and materials, planting and green infrastructure, wayfinding and signage, and a Story Map for public engagement.

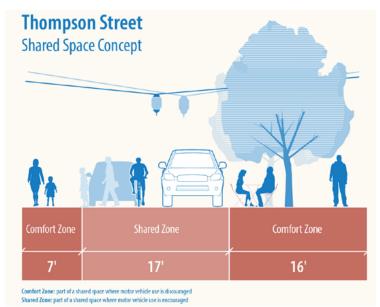
CLIENT

Town of Jaffrey Jo Ann Carr 10 Goodnow Street Jaffrey, NH 03452 603.532.7445



DOWNTOWN WINCHESTER IMPROVEMENTS

WINCHESTER, MA





The Town of Winchester has been working continuously with the Toole Design Team to address traffic calming and improvements to pedestrian and multimodal access throughout the town. Our team began looking at the Downtown area as part of an overall improvement plan to address several areas of concern to improve accessibility, safety and overall public realm spaces. The Downtown Improvement and Action Plan (DIAP) was developed to address several areas within the district, the plan included recommendations for wider sidewalks, improved pedestrian crossings, and shared use path connectivity along Main street, traffic calming and pedestrian safety around the Quill Rotary, alternatives for shared street along Thompson Street and coordination with the on-going MBTA Commuter Station Upgrade.

The DIAP was approved by the Town and steering committee and the project team is now moving into final design for several of the recommended improvement areas. This project phase, to be completed in 2025, will include sidewalk reconstruction and lane width reduction along Main Street, approach and lane reconfiguration within the rotary, and redesign of drop-off area near the MBTA station access. Green infrastructure, curbside management for parking and deliveries, and incorporation of the new PROWAG standards are some of the areas the team is focusing on and incorporating into the improvements for Downtown Winchester.

CLIENT

Town of Winchester Beth Rudolph, P.E. Town Engineer/Town Manager Engineering Department 71 Mount Vernon Street Winchester, MA 01890 781.721.7120 brudolph@winchester.us



MAIN STREET COMPLETE STREETS DESIGN SERVICES

NORTHAMPTON, MA



For over 300 years, Main Street in Northampton has been a center for civic activity and commerce in the upper Massachusetts Pioneer Valley. Today, Main Street in Northampton is not only a beloved place for locals and tourists to shop and dine but is recognized as a hub for community activism, arts, culture, and more. However, the current vehicle-dominated streetscape creates unsafe conditions for all street users, and the project area was included in the 2008-2017 Highway Safety Improvement Program (HSIP) bicycle and pedestrian crash clusters.

Toole Design is leading the City's effort to invest in the future of its Main Street by providing comprehensive design through construction services. The design seeks to significantly improve safety and access for all by:

- Narrowing the roadway and increasing legibility of travelways for all modes,
- Significantly expanding sidewalk width and public realm amenities,
- Meeting or exceeding ADA standards for grades, crossings, and parking,
- Providing dedicated bike facilities, and
- Redesigning the lighting scheme to increase crossing safety.

The project is committed to climate resilience by supporting a cooler, tree-shaded street through planting areas with greatly expanded soil access. Stormwater infiltrating curb extensions will help reduce storm impact on downstream drains while filtering pollutants. Careful material choices will further assist in reducing emissions and heat.

Toole Design's engagement strategy has been at the forefront of a community led design process. In addition to public and stakeholder meetings using interactive and small group formats, engagement has included the implementation of a comprehensive tactical demonstration project and an online StoryMap that provides project resources and tracks progress.

Currently this \$21M project is slated for funding under the state Transportation Improvement Program in FY 2025 as the region's highest priority project.

CLIENT

City of Northampton Carolyn Misch 210 Main Street, City Hall, Northampton, MA 01060 413.587.1287 cmisch@northamptonma.gov



PEACHTREE SHARED SPACE STUDY

ATLANTA, GA



Toole Design led one of Downtown Atlanta's signature projects, the redesign of Peachtree Street into a world-class shared space to bring people together and transform the way people move through Downtown.

This project brought the City's vision of a shared street to life by achieving buy-in from the public and stakeholders, integrating elements from previous plans, analyzing traffic patterns, and conducting environmental and historical due diligence. It addresses unique considerations for Peachtree Street, including the integration of existing streetcar tracks, the impact of one-way streets, commuter bus staging, intersection design, and stormwater management.

The project's community engagement included an advisory committee, a pair of week-long workshops, a demonstration project, educational videos, an interactive project website, a WikiMap, and social media. Due to the COVID-19 pandemic, we shifted many of the engagement activities to virtual platforms.

The project resulted in three final deliverables: a conceptual design study, an activation and programming strategy, and a draft Georgia Department of Transportation (GDOT) concept report. These deliverables included a conceptual design, illustrations, cost estimates, traffic recommendations, phasing, public space activation strategies, and real estate activation strategies that gave the City design direction and set them up to pursue Federal and other funding opportunities.

We helped the City apply for ARC's Transportation Improvement Program (TIP) funding, and they were awarded \$1.2 million for the design phase as a result.

CLIENT

City of Atlanta Monique Forte, Assistant Director Office of Design 55 Trinity Avenue SW Atlanta, GA 30303 470.279.1545 mbforte@atlantaga.gov





JASON DEGRAY, PE, PTOE

BOSTON OFFICE DIRECTOR

PROFESSIONAL HIGHLIGHTS

Years of Experience: 21

Toole Design: 2016-Present

Greeman Pedersen, Inc.: 2012-2016

BETA Group: 2010-2012 and 2002-2007

Vanasse Hangen Brustlin: 2007-2010

EDUCATION/ CERTIFICATION

Master of Science, Transportation Engineering, University of Massachusetts: 2002

Bachelor of Science, Mechanical Engineering, Boston University: 2000

Professional Engineer: MA, CT, FL, ME, MI NH, NY, RI, VT

Professional Traffic Operations Engineer

APPOINTMENTS/ AFFILIATIONS

Institute of Transportation Engineers, Chair of International Advocacy Committee

PUBLICATIONS

Contributor—Confessions of a Recovering Engineer: Transportation for a Strong Town, Charles Marohn Jr., John Wiley & Sons, Inc., 2021

OFFICE ADDRESS

2 Oliver Street, Suite 305 Boston, MA 02109 Jason develops sustainable transportation solutions for complex urban environments. As Toole Design's Boston Office Director, Jason leads a team in undertaking projects that deliver quantified public safety benefits, enhance mobility alternatives, and foster community inclusion. A major focus of his work has been creating Complete Streets solutions for constrained corridors to better accommodate all modes of travel. Many of these projects include the integration of public realm enhancements and infrastructure which fosters mobility options including separated bicycle facilities, accessible pedestrian infrastructure, bus priority and inclusive signalization strategies and have been on the cutting edge of Complete Streets design.

SELECTED PROJECT EXPERIENCE

Main Street (Route 9) Complete Streets Design Services, Northampton, MA Jason serves as Project Manager and Principal-in-Charge for Toole Design's efforts in assisting the City of Northampton with the reconstruction on Main Street through its iconic downtown. This building face to building face, full depth reconstruction project will completely recast the existing roadway into a truly complete street by implementing. It includes a road diet along the corridor, conversion of angle to parallel parking (some angle to remain), fully separated bicycle facilities, LID/ Green Infrastructure, public realm improvements to lighting landscaping, and trees, full traffic signal upgrades, water and sewer replacement and a district municipal geothermal heating array. Jason led early conceptualization of this project and is currently progressing to a 25% submission to MassDOT. The project is slated for construction in FY 2025 as part of the State's Transportation Improvement Program.

MassDOT Complete Streets On-Call

Jason serves as Project Director for Toole Design's on-call Complete Streets contracts with the Massachusetts Department of Transportation. Task orders range from reviewing Complete Streets designs, preparing Complete Streets training modules for both internal MassDOT personnel and municipal partners, undertaking specific design and engineering assignments such as the design of accessible ramps for the Longfellow Bridge and a transit mobility study to support the redesign of Route 9 in Hadley.

Boston Vision Zero Planning and On-Call Design, Boston, MA

Jason served as Engineer-of-Record for Boston's Vision Zero program. This program includes the identification of a high injury network, a rapid response program to address infrastructure needs in the wake of serious incidents and a capital investment component to realize transformational projects areas of enhanced safety need. Jason is responsible for the design, implementation and post implementation monitoring of transformational projects across the City. Jason's leadership on the Mattapan Square project included developing an operational strategy to provide critically needed pedestrian accommodations to Mattapan Station and transit signal priority for potential center running bus lanes along Blue Hill Avenue currently being advanced as part of that project.





KAREN FITZGERALD, PLA, SITES® AP

LANDSCAPE ARCHITECTURE PRACTICE LEAD

PROFESSIONAL HIGHLIGHTS Years of Experience: 35

Toole Design: 2018-Present

FitzDesign: 2005-2018

Nobis Engineering: 2005-2018

The Waterfield Design Group:

1999-2003

Pressley Associates, Inc.:

1994-1999

Bechtel Corporation: 1989-1994

The Halvorson Company:

1985-1987

EDUCATION/ CERTIFICATION

Master of Arts, Landscape Architecture, SUNY ESF: 1988

Bachelor of Science, Environmental Design, University of Massachusetts: 1983

Professional Landscape Architect: MA, NH

SITES AP

APPOINTMENTS/ AFFILIATIONS

American Society of Landscape Architects Karen is a Professional Landscape Architect with 35 years of experience in landscape architecture design and community planning. Karen has managed and implemented a wide variety of projects including complex urban streetscapes, urban open space, innovative planning regulations, and community master planning. Karen's background and skills in urban design and community planning bring a comprehensive understanding to her projects, from development policy to construction. Karen is passionate about community outreach and involvement, and the importance of maintaining a sense of place and community identity. She maintains a professional commitment to ecological design and continually looks to implement sustainable site design practices.

SELECTED PROJECT EXPERIENCE

Winchester Downtown Action Improvement Plan, Winchester, MA

Karen serves as project manager and lead designer working with the Town to study areas of the downtown district including the commercial core of Main Street, a major traffic circle, a small but lively commercial side street, and several other associated areas. The goals of the project were to explore options that would improve pedestrian safety, slow traffic through the downtown, and support outdoor retail and dining demand. Karen led the team in creating several conceptual design plans that focused on widening sidewalks, adding and preserving street trees, narrowing traffic lanes, providing shorter crosswalks, exploring shared street concepts and parking, delivery and curbside management.

Jaffrey Center Concept Plan, Jaffrey, NH

The downtown Jaffrey concept design project included visioning and visualization for several areas of public real associated with a major roundabout project. Karen led the Toole Design Team in creating concept design, plans and graphics for public gathering spaces, streetscapes and shared use pathways. The team coordinated closely with the Town, Steering Committee, and an on-going engineering effort managed by the NHDOT. Project work includes plans, renderings, cost opinions and a story map used for public outreach.

Boston Vision Zero/Mattapan Square, Boston, MA

As part of the Vision Zero project in Mattapan Square, Karen is leading a team to advance the design of the Square and sections of the Blue Hill Avenue corridor to create a multi-modal neighborhood streetscape. Working along side the City and incorporating plans to construct center-running bus-only lanes within the project area, the Toole Design team is focused on balancing pedestrian safety and comfort, placemaking, preserving urban tree canopy with the need to maintain adequate vehicular flow and access. The project includes concept plans and traffic modeling, video outreach visualizations, and connecting bicycle infrastructure.





ALEX MCKEAG

URBAN DESIGNER

PROFESSIONAL HIGHLIGHTS

Years of Experience: 12

Toole Design: 2019-Present

Congress for the New Urbanism: 2012-2017

EDUCATION/ CERTIFICATION

Master of Sustainable Urban Planning and Design, KTH Royal Institute of Technology: 2019

Bachelor of Arts, Anthropology, University of Illinois at Chicago: 2010 Alex is a planner and designer with experience that includes multimodal street design, suburban retrofits, missing middle housing, and incremental development. He has worked to develop context-sensitive designs for urban and suburban streets and to expand the international Highways to Boulevards movement, which highlights the damage done by 20th-century highway building and empowers communities to re-evaluate their in-city highway infrastructure. Alex combines his transportation reform background and passion for structural change to illustrate new best practices in land use and transportation.

SELECTED PROJECT EXPERIENCE

Jaffrey Roundabout Landscape Design, Jaffrey, NH

The downtown Jaffrey concept design project includes visioning and visualization for several areas of public space adjacent to a major roundabout and bridge project. Alex helped develop the concept design, plans and graphics for public gathering spaces, streetscapes and shared use pathways, including building a 3D model of Jaffrey's downtown, that allowed the client to "walk through" the proposed design. Project work includes plans, renderings, cost opinions and a story map used for public outreach.

Brentwood Homes Redevelopment, Edmonton, AB

Toole Design provided landscape architecture services to support the analysis, feasibility, and master planning for the Brentwood Homes Development in Northwest Edmonton. Alex co-led the analysis of the open space network review and the creation of a high-level vision and master plan for open space and amenities. The design incorporates a network of formal and informal spaces to encourage incidental play and social exchange. The transportation design incorporated raised intersections and crossings at all major pedestrian crossings and a flush "play street" into the final concept.

Boston Vision Zero-Mattapan Square, Boston, MA

Alex work with project engineers and landscape architectures to refine the redesign of the Square and sections of the Blue Hill Avenue corridor to create a multimodal neighborhood streetscape. Working along side the City and incorporating plans to construct center-running bus-only lanes within the project area, the team is focused on balancing pedestrian safety and comfort, placemaking, preserving urban tree canopy with the need to maintain adequate vehicular flow and access. Alex developed a 3D model of the site, along with three different concepts for the site, in order to help the City, public, and stakeholders visualize and experience the trade-offs of each concepts before moving forward with a preferred design.

Lowell Lower Locks Structural Analysis, Design Feasibility, and Visioning StudyLowell, MA

Alex is an urban designer in a small landscape and urban design team. This projects aims to develop an new vision for the historic Lower Locks in downtown Lowell, a unique section of the city that seeks to knit newly-redeveloped mill buildings, mid-century educational institutions, and historic and recreational sites into one cohesive place. Alex helped lead public engagement for the project and is developing design concepts and perspective renderings of the design vision.





PRESTON BUEHRER, PE

SENIOR ENGINEER

PROFESSIONAL HIGHLIGHTS

Years of Experience: 12
Toole Design: 2017-Present

Tel Nexx, Inc.: 2012-2017 Fraunhofer CMI: 2011-2012

EDUCATION/ CERTIFICATION

Bachelor of Science, Mechanical Engineering, Boston University College of Engineering: 2012

Professional Engineer: MA

Preston is a professional engineer with over a decade of design and project management experience on a wide variety of engineering projects. Preston is adept at managing projects that integrate new and novel engineering approaches to solve issues of mobility, safety, and equity in the design process. He is detail oriented and a skilled communicator, allowing him to deliver high-quality engineering projects while coordinating amongst a variety of stakeholders. Preston's background in data analysis allows him to simultaneously create designs that are well-informed by new and traditional data sources.

SELECTED PROJECT EXPERIENCE

Union Square Plaza and Streetscape Design, Somerville, MA

Preston served as the Deputy Project Manager for the Union Square Plaza and Streetscape Design in Somerville. After completing a major sewer separation and utility replacement project, the City looked to implement a vision for Union Square as a pedestrian focused area, with plazas and roadways that create a welcoming space for all, encourage active transportation, and support a thriving local business district. Preston assisted with project management of a large design team. Preston served as a technical lead for multiple project elements and is responsible for coordinating efforts between internal and external team members.

Vision Zero Boston, Boston, MA

Preston serves as the Project Manager for the City of Boston's Vision Zero Planning and Design contract, which focuses on implementing roadway safety improvements throughout the City. Vision Zero Boston is fundamentally a proactive and reactive project that aims to eliminate all fatal and severe crashes within the City by 2030. Preston is overseeing the development of multiple capital improvement projects that seek to fulfill the City's commitment to Vision Zero. Preston coordinates with various agencies internal and external to the City to implement capital improvement projects ranging from curb extensions to full corridor reconstructions.

PLAN: Dorchester Avenue, Boston, MA

Preston served as an engineer supporting the development of a comprehensive transportation plan for Dorchester Avenue in Boston's South Boston neighborhood. The plan identified key challenges along Dorchester Avenue and seeks to guide upcoming development in the area to ensure equitable and sustainable transportation options in the area. Preston provided analysis and technical support for existing pedestrian and bicyclists conditions. He provided guidance on potential quick-build projects that can be used to achieve short-term goals or demonstrate the potential of longer-term projects.

First/Ashley and William Street Corridor Redesign, Ann Arbor, MI

Preston served as an engineer supporting data collection and analysis efforts for the reconversion of First Street and Ashley Street in Ann Arbor to two-way operation. Preston conducted origin-destination studies with Streetlight Data's online platform, utilizing GPS data to gather information on local and regional travel patterns through downtown Ann Arbor. He performed data analysis to highlight key travel patterns and how changes to the roadway network could affect these trips.

Town of Needham, MA 02.09.24



— An Apex Company —







PROPOSAL

February 2024

Downtown Redesign

Great Plain Avenue Corridor RFP No. 24DPW189M



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PRESENTATIONS	Separate Cover





February 9, 2024

85 Devonshire Street, 3rd Floor, Boston, MA 02109 Tel: 617.412.4480

Department of Public Works Public Services Administration Building 500 Dedham Avenue Needham, MA 02492

Re: Request for Proposal for Downtown Redesign – Great Plain Avenue Corridor – 24DPW189M

To the Town of Needham:

Weston & Sampson is pleased to submit its proposal to provide the Town of Needham with design and engineering services for the reimagining of Needham's downtown along Great Plain Avenue between Linden Street and Warren Street.

With local experience and a range of project success in Needham, we have developed a strong working knowledge of the town's standards and municipal infrastructure. As an interdisciplinary firm with a design studio in downtown Boston, we will support the full range of disciplines and services this project requires. We want to assure the town we are engaged and focused on:

- Collaborating with designated town departments and groups to develop strong and widely supported conceptual improvement plans and design solutions.
- Leading energized and constructive public engagement processes that connect with the community, including invested residents, and stakeholders.
- Creating realistic, achievable plans and guidelines for the design, rehabilitation, and repair of assets along the Great Plain Avenue Corridor that are accessible, multi-generational, and attractive in a way that improves quality of life for residents and visitors alike.
- Working at a pace that meets project deadlines and adheres to established schedules. We have the capacity and record of committing the resources necessary to meet important deadlines and using tight control measures to remain within budget and complete quality work on schedule.
- Incorporating climate resiliency and green infrastructure into all renovation/design strategies.

We are confident Weston & Sampson will provide the town with a full range of top-tier, cost-effective design and engineering services. Weston & Sampson has the local knowledge, relevant experience, and proven approach to meet and exceed all the requirements of this project. Please contact me by phone at 857-415-3891 or by email at ruanec@wseinc.com if you have any questions regarding our submittal. We very much look forward to continuing our partnership with the Town of Needham.

Sincerely,

WESTON & SAMPSON ENGINEERS, INC.

(heri Rume

Cheri Ruane, FASLA

Vice President | Design Discipline Leader

Acknowledgement: We acknowledge receipt of Addendum #1, which was released on January 8, 2024, and

Addendum #2, which was released on February 1, 2024.

1 - DETAILED APPROACH PLAN

Truly Great Public Open Space

The streetscape, once complete, will be a place of equity and inclusion for all residents of Needham. Weston & Sampson's Design Studio has a great deal of knowledge that is infinitely more resonant when we use it to help everyday citizens articulate their needs and create public spaces that are responsive to the communities they serve.

You know you are in a great space when people feel encouraged to participate in shaping the life of the space. It creates the kind of open atmosphere that attracts more people. Since public spaces both reflect and shape the communities they serve, they become incredibly meaningful places for those of us working to create more equitable cities and towns. When neighbors, representing the full cross-section of a community, come together to improve their open spaces, results will be tangible and immediate, and this process itself amplifies the sense of inclusion that truly great places generate.

People read their town, in part, by the reflections of local communities that are represented in the public realm—in our parks, plazas, streets, and squares. Public spaces are a tool for shifting perception and awareness. Creating more diverse places is important, but the way to do this is not to focus directly on diversity. Diversity itself is a goal, not a tool. To get there, we must develop mechanisms and processes that make people of all backgrounds, abilities, and ages feel welcome, as co-creators, in the making of places. In essence, we need a more place-centered form of open space design.

COMMITMENT TO EXCELLENCE

At Weston & Sampson, we provide strong project management in support of design excellence. We take pride in working simultaneously at two different design levels: 1) the overall project vision for the landscape, and 2) focusing on the smaller details and materials, and their relationship to the overall project vision and goals. Through our design process, we evaluate a range of factors and principles to help guide our goal of providing clients

with a landscape that will stand the test of time, and where future maintenance needs are considered. With our in-house team of experts, we pay particular attention to resiliency and sustainability during the design process. Our projects invite public use and enjoyment, and they stand up well to the intense use that successful civic and urban landscapes receive.



Figure 1: 200 Berkeley Street, Boston, MA.

DESIGNING FOR SPECIFIC SITE NEEDS, CLIENTS, & MAINTENANCE

At Weston & Sampson, we pride ourselves on working with clients to understand their needs for open space, how it is programmed, and what amenities are needed. We design spaces that take into consideration future uses as well as maintenance requirements. We ask ourselves questions like, "How many person hours are needed weekly to maintain this area?" and, "Where will the snow be stored during the winter?" Understanding these needs helps us to deliver a space that works for everyone from the resident users down to the people who maintain it. We don't just design our spaces for today, we design them for many years to come.

WORKING WITH CLIENTS, AGENCIES & MUNICIPALITIES

At Weston & Sampson, we collaborate with clients across New England to design open spaces that successfully serve community goals. We have decades of experience in leading robust community engagement and navigating the approvals process with town committees, stakeholder groups, and commissions.



QA/QC

As a multi-disciplinary design firm, Weston & Sampson will simplify the client and consultant relationship through our internal network of in-house experts. This team dynamic helps strengthen the project deliverable the client receives from a consistency standpoint. We have a multitude of complex projects where our internal teams have successfully delivered final products that have exceeded client expectations.

Assigned quality control team members are technical experts who are not directly involved in the day-to-day design and production of the project deliverables. Their role is to review the documents for errors and omissions across all disciplines. We have found this process significantly reduces the number of contractor-driven change orders during construction.

Design Approach

Per the solicitation for detailed proposals, we have broken down our proposal into the following tasks. We have also provided our approach to each specific task and the deliverables that will be included.

- Task A: Review of Existing Designs and Town-Provided Information
- Task B: Review and Analysis of Existing Conditions
- Task C: Conceptual Streetscape Design
- Task D: 25% Design Documents Submission
- Task E: 80% Design Documents Submission
- Task F: Final Bid Documents Submission
- Task G: Bid Assistance
- Task H: Construction Administration



Figure 2: 425 Medford Street, Charlestown, MA.

TASK A: REVIEW OF EXISTING DESIGNS & TOWN PROVIDED INFORMATION – MARCH 2024

This task will include the up-front investigation and research of existing information to define the applicable streetscape parameters and project limits. We will attend one kick-off meeting with the town to capture institutional knowledge of the project.

Deliverables:

- Attend one project kick-off meeting with the town
- A review of the previous design studies
- A review of the traffic conditions based on the provided study
- A review of available survey and GIS information relative to applicable utilities that may be impacted by or needed for the project; this will include analysis to approximate connection points and determination of stormwater mitigation options

TASK B: REVIEW & ANALYSIS OF EXISTING CONDITIONS – MARCH TO APRIL 2024

We will begin by reviewing all the existing information available received from the town with our landscape architecture, transportation, and civil engineering teams. We will attend one on-site meeting with town staff. During this site visit, we will observe vehicular traffic operations and safety concerns and conduct an inventory of site amenities. We will also review how pedestrians and cyclists use the street and where, if any, conflicts exist.

During this exercise, we will study the existing topography and determine if any existing site features may or should be preserved and incorporated into the future design.

Finally, we will assess the health and species diversity of the existing trees throughout the corridor to ascertain if any of them may be incorporated into our master plan design. We will present this information to the town and stakeholders through site analysis plans and diagrams.



Deliverables:

- Attend one on-site meeting with town staff and design team
- Review existing documentation supplied by the town
- Prepare site analysis plans/diagrams

TASK C: CONCEPTUAL STREETSCAPE DESIGN SUBMISSION - MAY TO JULY 2024

We will present existing conditions site analysis plans/diagrams and precedent image boards at the first stakeholder meeting, which will help to facilitate feedback and ideas we may incorporate into the conceptual streetscape design options.

Our conceptual designs will be cognizant of the short- and long-term maintenance requirements of DPW staff. We will work hand-in-hand with them to understand their needs and how this new section of downtown will be maintained. Selected materials will also be cognizant of their maintenance requirements, and we will also address how snow is removed from the street. We will include trees and plants that are hardy, salt tolerant and that will survive in this location.

Our transportation team will review the existing traffic studies to determine if travel lanes may be reduced to provide more room for pedestrian gathering and passage and for bicycle accommodations. They will also review the town's parking guidelines and work with the town to determine current and future needs for on-street parking.

Our civil engineering team will develop conceptual stormwater plans depicting locations (no inverts) for utility connections and a drainage network. This task will include services to assist in establishing a conceptual utility plan design for the project. The concept will be developed based upon site constraints, input from stakeholders, and limits of the project. We will review the potential need for water, sewer, telecommunications, electric, and drainage improvements to successfully plan this project as it relates to the surrounding infrastructure and constraints. They will also assist with the development of LID stormwater management principles that may be incorporated into the design. At the conclusion of this task, we will have a reasonably accurate sense of the approximate

drainage patterns and the areas proposed for stormwater mitigation systems and utility layouts.

We will review the existing town standard site amenities and provide recommendations on potential new options. We will produce site amenity precedent image boards for seating, lighting, bike racks, trash receptacles, bollards, signage, EV charging stations, parking meter stations, and planting. These precedent image boards will help form the basis of the street design guidelines for amenities.

We will work closely with the town and stakeholders to produce two streetscape design options for the project area based on the overall goals and from feedback received. These designs will address pedestrian gathering, circulation, and connections to the surrounding downtown. Our designs will meet ADA requirements, where possible, as we envision a street that is universally accessible for all users.

We will present these two concepts to you and other stakeholders at one in-person meeting. We will include up to six 3D rendering of both concepts. We will use the stakeholder feedback received at this meeting to produce one final preferred alternative streetscape design plan. This design will be augmented with up to 12 3D renderings. This final streetscape design, with renderings, will be presented at one final in-person meeting with the town and stakeholders.



Figure 3: Developing a Design Concept

We anticipate attending up to nine virtual coordination meetings with the design team and town staff during this phase. These meetings will help to inform the streetscape design by fostering communication between the town and stakeholder and our design team, which will be a critical component of this project's success.

Deliverables:

- Prepare precedent image boards for proposed planting
- Prepare precedent image boards for proposed site amenities
- Prepare image boards of relevant streetscapes
- Provide design guidelines for streetscape amenities
- Attend three in-person team meetings with town staff and stakeholders
- Attend up to nine virtual design team meetings with town staff
- Develop two conceptual streetscape design options for review by the town and stakeholders
- Prepare six 3D renderings for both streetscape concepts (12 total)
- Prepare one rendered final preferred alternative streetscape design plan
- Prepare up to 12 additional 3D renderings of the final preferred alternative streetscape design
- Prepare a cost opinion of the preferred alternative streetscape design
- Prepare graphic presentations for each town and stakeholder meeting
- Project administration
- Team coordination

TASK D: 25% DESIGN DOCUMENTS SUBMISSION - AUGUST TO SEPTEMBER 2024

Included in this task will be preparation of 25% design documents for transportation, civil engineering, electrical, and landscape architecture.

This submission will include drawings for legends and notes, typical sections, construction plans, baseline and tie plans, curb tie plans, profile plans, grading plans, drainage and utility plans, sign and pavement marking plans, traffic signal plans (if required), lighting plans, landscape and streetscape plans, traffic management plans, electrical plans, top line cross sections, and construction details. An outline of expected specifications will also be included in this submission. We will also develop a 25% design level opinion of probable construction costs as part of this submission.

We will keep constant communication open with Town staff and have included four virtual meetings as part of this task. Finally, we will present this developed design along with an opinion of probable construction costs to the town's Select Board at one virtual meeting.

Deliverables:

- Prepare 25% design plans and details for:
 - Transportation
 - Civil Engineering
 - Electrical
 - Landscape Architecture
- Prepare outline specifications for the above referenced design discipline scope items
- Attend four virtual meetings with town staff
- Attend one virtual meeting with the town's Select Board
- Prepare an opinion of probable construction cost for the 25% design documents
- Prepare graphics for Select Board meeting
- Project administration
- Team coordination

TASK E: 80% DESIGN DOCUMENTS SUBMISSION - OCTOBER 2024 TO FEBRUARY 2025

Included in this task will be preparation of 80% design documents for transportation, civil engineering, electrical, and landscape architecture.

This submission will include updating the 25% design drawings including legends and notes, typical sections, construction plans, baseline and tie plans, curb tie plans, profile plans, grading plans, drainage and utility plans, sign and pavement marking plans, traffic signal plans, lighting plans, streetscape landscape and plans, traffic management plans, electrical plans, cross sections, and construction details. Draft specifications will also be included in this submission along with an updated 80% design level opinion of probable construction cost.

We will keep constant communication open with Town staff and have included five virtual meetings as part of this task. Finally, we will present this developed design along with an updated opinion of probable construction costs to the town's Select Board at one virtual meeting.



Deliverables:

- Prepare 80% design plans and details for:
 - Transportation
 - Civil Engineering
 - Electrical
 - Landscape Architecture
- Prepare draft specifications for the above referenced design discipline scope items
- Attend five virtual meetings with town staff
- Attend one virtual meeting with the town's Select Board
- Prepare an updated opinion of probable construction cost for the 80% design documents
- Prepare graphics for Select Board meeting
- Project administration
- Team coordination

TASK F: FINAL BID DOCUMENTS SUBMISSION – MARCH TO APRIL 2025

Weston & Sampson will prepare final bid documents for transportation, civil engineering, electrical, and landscape architecture.

This submission will include final drawings for legends and notes, typical sections, construction plans, baseline and tie plans, curb tie plans, profile plans, grading plans, drainage and utility plans, sign and pavement marking plans, traffic signal plans, lighting plans, landscape and streetscape plans, traffic management plans, electrical plans, cross sections, and construction details. Final bid document specifications and opinion of probable construction costs will also be included in this submission.

We will keep constant communication open with town staff and have included two virtual meetings as part of this task.



Figure 4: Downtown Revitalization, Northborough, MA.

Deliverables:

- Prepare bid document design plans and details for:
 - Transportation
 - Civil Engineering
 - Electrical
 - Landscape Architecture
- Prepare bid document specifications for the above referenced design discipline scope items
- Prepare an updated opinion of probable construction cost for the 100% design documents
- Attend two virtual meetings with town staff
- Project administration
- Team coordination

TASK G: BID ASSISTANCE - MAY 2025

Weston & Sampson will assist the town during the bidding process. Providing information and documents for the bid issue will be the first item in this task. We will attend one pre-bid conference/site walk with contractors to discuss the project and scope required.

We will respond to contractor questions and RFIs and prepare up to one addenda. All bids received will be reviewed and we will check references of the preferred bidder.

Finally, we will make a recommendation to the town on the preferred contractor bid.

Deliverables:

- Attend one pre-bid conference/site walk with contractors
- Respond to contractor driven RFIs
- Respond to contractor bid questions
- Prepare up to one addenda
- Check contractor references
- Make a contractor recommendation to the town



TASK H: CONSTRUCTION ADMINISTRATION – AUGUST 2025 TO AUGUST 2027

Weston & Sampson will assist the town during the construction of the project. Our typical construction administration services are listed below.

Before we finalize the number of site visits and full scope of construction administration tasks, we would like to understand the project scope limits and exact duration of the project.

Deliverables:

- On-site review meetings with the town and contractor
- Production of meeting notes
- Review of submittals and shop drawings
- Respond to contractor driven RFIs
- Attend one plant tagging trip
- Review of contractor payment requisitions
- Attend punch list review site visits with written reports
- Attend final close-out site visit with written report
- Attend 12-month warranty site visit with written report
- Project administration
- Team coordination



Figure 5: Weston & Sampson staff in the field.



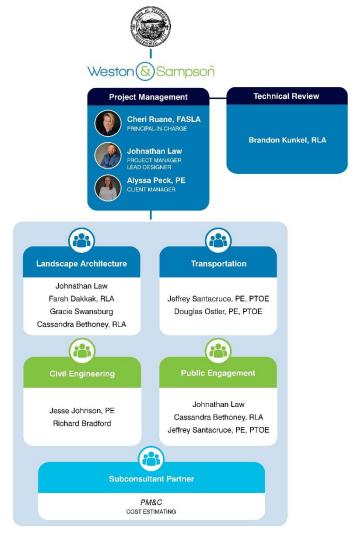
Your Dedicated Team

Weston & Sampson has assembled a team with the qualifications and experience to provide the required services for the Town of Needham. Our team includes qualified architects and engineers licensed in Massachusetts, as well as additional specialists with appropriate certifications, who have successfully worked on similar projects in Massachusetts over the past several years. Upon selection, our proposed team members will be available immediately to begin work and complete the project within the required schedule.

The organizational chart identifies each of the key team members and their roles on this contract. On the subsequent pages, we have provided summaries of our project management and technical review teams. Weston & Sampson understands that naming these project principals indicates the commitment of these individuals to this contract.

Later in this submittal, we provide resumes detailing the educational background, certification(s) and license(s), training, and specific project experience.

Together, the Weston & Sampson team will deliver expertise in forward-thinking design, as evidenced by our success in implementing resilient design projects across the Commonwealth, as well as our wealth of award-winning park and other public projects.





PROJECT MANAGEMENT

Cheri Ruane, FASLA, will serve as principal-in-charge and will ensure the project remains a priority. As a Massachusetts-registered landscape architect, she has more than 25 years of experience in project



management, construction administration, site analysis, and public design. Cheri has managed the design and construction of more than \$100 million in public improvements to parks, playgrounds, and recreation sites. She has delivered resilient site and urban landscape improvements throughout Boston, integrating sustainable and climate-resilient designs. She is a leader in community outreach and owner-interface presentations for municipal improvement projects across the Commonwealth.

Johnathan Law will serve as project manager and lead designer for this project. Johnathan has more than 22 years of experience managing urban design and streetscape projects that incorporate critical



public engagement meetings. Johnathan has played a key role on a range of urban design, streetscape, and open space improvement projects throughout New England, merging his design and technical expertise to create award-winning results. His recent experience includes serving as project manager and lead designer for the 200 Berkely Street improvements project, the master plan for 425 Medford Street in Charlestown that involved the development of new public open spaces and Complete Streets that connected the site to the existing neighborhood, developing a Downtown Revitalization Master Plan in Northborough, and implementing Phase 1 designs at Moakley Park in Boston. He is also leading the design of the Chinatown streets and sidewalks master plan study in Boston. With his previous employer, Johnathan designed and supervised the construction of many award-winning streetscape projects including Concord Main Street in Concord, New Hampshire, Pleasant Steet in Claremont, New Hampshire, Monument Square in Leominster, Massachusetts, Keene Downtown Revitalization in Keene, New Hampshire, and East Hollis Street in Nashua, New Hampshire.

Alyssa Peck, PE, will serve as client manager for this contract. Alyssa is a Massachusetts-registered professional engineer and is a project manager with more than 18 years of experience. Alyssa is responsible



for civil site/transportation projects, infrastructure and stormwater management design, soil evaluations, development of site plan concepts, and contract document preparation. She has experience in preparation of permit applications for various municipal authorities; compilation of construction plans and bid documents; and construction administration tasks. She worked as a design engineer on both the School Street Reconstruction Project and the Corporation Street and Enterprise Road Reconstruction projects in Barnstable. For our work on the Newman School playing fields in Needham, Alyssa's responsibilities included soil evaluation and stormwater design, permitting, and preparation of plans and bid documents. She has served as project manager for several multidisciplinary projects and on-call assignments including the Ayer Rail Trail parking facility, which included multiple parking deck alternatives, and various parking facilities, roadway, and drainage improvement projects.

TECHNICAL REVIEW

Brandon Kunkel, RLA, is a Massachusetts-registered landscape architect with more than 22 years of experience in innovative planning and design. As Weston & Sampson's landscape architecture and



design practice leader, he oversees all landscape architecture services throughout Massachusetts and New England. Brandon's areas of expertise include natural resource open space parks, trails, conservation and rehabilitation, athletic fields/complexes, academic campuses, and mixeduse developments. As project manager for the awardwinning Langone Park and Puopolo Playground project, he worked with the Boston Parks and Recreation Department to develop final designs, coordinate permitting, and provide construction oversight for the complete refurbishment of this signature climate resilient waterfront park. Brandon's other relevant experience includes development of a master plan for a new recreational complex in Orleans;



master plan development for Cannery Wharf Park in Provincetown; development of a community-wide master plan in Kittery, Maine; and site-specific master plans for Harambee Park in Dorchester (Boston), Riverfront Park in Springfield, and Prescott Park in Portsmouth, New Hampshire.

TRANSPORTATION

Jeffrey Santacruce, PE, PTOE, has more than 28 years of experience and nearly 20 years of experience overseeing projects. Jeffrey serves as a senior team leader in our Transportation group and is



Massachusetts-registered professional enaineer. roadwav Leading and traffic engineering/transportation planning efforts throughout New England, Jeffrey has managed a range of projects involving roadway reconstruction, traffic signal design, geometric roadway design, safety improvements, traffic calming strategies, roundabout design, and Complete Streets designs. He provided transportation planning/engineering services for a downtown revitalization project in Millbury, multiple intersection/roadway improvement projects in Chelsea, and the Main Street improvement project in Downtown Concord, New Hampshire, as well as a range of other transportation, traffic signal, and Complete Street projects across the region. Jeffrey served as senior traffic manager for the MBTA's Green Line extension project. He is currently managing the Hanscom Air Force Base Vandenberg Gate Design Build Reconstruction Project in Lincoln, Massachusetts, which involves coordination with MassDOT, MBTA, Massport, MADEP, ACOE, National Parks, the Town of Lincoln and the U.S. Air Force. He also has experience in the management of interdisciplinary projects, cost estimating, quality check and assurance, constructability reviews, and construction administration, and is adept at communicating and developing consensuses with community stakeholders during public engagement processes.

PM&C

We have also included PM&C on our team to provide cost estimating services. PM&C was created in 2005 and strives to provide its clients with proven, accurate cost estimates. PM&C is proud of its ability and history to accurately predict costs at an early stage of design when there is typically incomplete information available.

PM&C has an extensive in-house pricing database that is continually updated with real-time bid information, enabling estimates to be adjusted to reflect current market pricing. Estimates always conform to estimating standards, and they will prepare estimates in either Masterformat, Uniformat, or both, depending on the desired format agreed to prior to commencing the estimate.

Because the vast majority of estimates are publicly bid upon, the PM&C team is able to track bid accuracy against actual bid results. Additionally, most estimates are reconciled against those prepared by a construction manager or other independent estimator, thus enabling them to see current market pricing. Escalation percentages are then adjusted based on this feedback. PM&C closely monitors not only past estimating bid results but also what contractors, subcontractors, suppliers, commodity, and general market trends are and calibrate escalation percentages to reflect these trends.

These unique service capabilities are what set PM&C apart from other firms. They value partnership from the moment they are hired and work hand in hand with clients throughout the entire project. As a small, hands-on firm, their clients are guaranteed to work with experienced estimators who stay with them throughout the duration of the project.



BACKGROUND

2022-Present Vice President | Discipline Leader Weston & Sampson

2015-2021 Vice President | Practice Leader Weston & Sampson

2006-2015 Practice Leader | Senior Associate Weston & Sampson

2005-Present Visiting Lecturer and Studio Instructor Harvard Graduate School of Design

2001-2006 Senior Landscape Architect Jacques Whitford Company, Inc.

> 1999-2001 Summer Intern Carol R. Johnson Associates

1995-1999 Assistant Project Manager Boston Parks and Recreation Department

EDUCATION

2001 Master of Landscape Architecture Harvard University Graduate School of Design

1995 Bachelor of Science, *cum laude* Landscape Architecture University of Massachusetts

PROFESSIONAL REGISTRATION

Registered Landscape Architect:
 Massachusetts No. 1220
 New Hampshire No. 00012
 Connecticut No. LAR.0001510
 New York No. 002211-1
 Florida No. 6667031
 North Carolina No. 2141
 South Carolina No. LSA 1336
 Texas No. 3270
 Colorado No. LA.0001152

PROFESSIONAL AFFILIATIONS

Fellow, American Society of Landscape Architects

CLARB Certified

Cheri is a Registered Landscape Architect with 25 years of experience in multi-disciplinary project management, community engagement, construction administration, and business development. She has special expertise with socially and politically complex site design projects and facilitating public participation. The combination of managing projects from the perspective of the owner, while working for the City of Boston, as well as supporting clients as a consultant, has given Cheri a unique understanding of how best to manage complex projects and work in close coordination with various stakeholders.



Cheri understands that urban landscapes require a creative approach to design integration. From coordinating the goals of owners and stakeholders to choosing appropriate construction materials, these places have complicated contexts that need to be carefully addressed in order for the end result to be successful.

SPECIFIC PROJECT EXPERIENCE

Master Plan for 425 Medford Street, The Flatley Company, Charlestown, Massachusetts. Principal-in-Charge of the master plan design for this waterfront site. This mixed-use housing and retail/commercial development prioritizes addressing existing and future site flooding from predicted sea level rise and climate change by incorporating a resilient flood barrier within a system of new public open spaces. The master plan design will incorporate a range of new public open spaces that connect to the existing neighborhood/community and the newly created waterfront park. Sustainability is a key component of the overall design, with a focus on stormwater management and the reduction of the urban heat island effect. This master plan is also designed to be universally accessible to all users, with a focus on complete street principles.

Downtown Visioning and Connectivity, Portsmouth, New Hampshire. Provided support for the Vaughan Mall visioning initiative that involved a review of the existing zoning requirements and possible build-out scenarios for city-owned parcels to revitalize the downtown and repurpose surface parking lots to create a more pedestrian- and retail-friendly environment. Project efforts included identifying key priorities from the city-wide master plan and an evaluation of ways to implement pedestrian connectivity, urban design/planning, urban forestry, and visioning.

Stenton Mill Redevelopment, WinnDevelopment, Sanford, Maine. Team leader for Weston & Sampson's efforts as the landscape architect for the renovation and redevelopment of the Stenton Mill. Responsible for supporting Winn Development and the team of design consultants in creating a new mixed-use development. The design will include new public open spaces, maximizing existing connections and creating new connections to adjacent neighborhoods. These placemaking spaces include multi-functional entry plazas, a promenade with amphitheater seating, new parking lot with green infrastructure, a children's playground, and open lawn areas for exercise and gathering.



PROFESSIONAL AFFILIATIONS, CONT.

Trustee, Former President, Boston Society of Landscape Architects

AWARDS

2022

Pinnacle Award Achievement in the Professions Greater Boston Chamber of Commerce | Women's Network

2020

Women in Design Award of Excellence Boston Society for Architecture

PUBLICATIONS

May 2023, Ruane, C., "Stone Soup: Building Resilient Parks One Ingredient at a Time," Parks & Rec Business

May 2023, Ruane, C., Mariano, M., "Design and Engineering Considerations for Splash Pads," Parks & Recreation

August 2022, Ruane, C., "Principles of Inclusive Playground Design: Designing playgrounds to benefit all," Parks & Recreation

June 2022, Ruane, C., "Principles of Inclusive Playground Design," New England Real Estate Journal

April 2022, Ruane, C., "Designing a Universal Playground on Top of a Closed Landfill," High Profile

February 2022, Ruane, C., "Parks are Essential Public Health Infrastructure," Parks & Recreation

PRESENTATIONS

2019, Speaker, Designing for Inclusive Play, BSLA webinar

2018, Panelist, 500 Women Scientists, Climate Change, Boston University, (September 5)

2018, Interviewee, Wallace, Elizabeth, Inside the Rise of "Risky" Playground Design, Architectural Digest, (May 1), https://www.architecturaldigest. com/story/risky-play-design

2018, Interviewee, Boston Voyager, "Meet Cheri Ruane | Weston & Sampson's Design Studio in Downtown," (April 3), Public Outreach Facilitation for Redevelopment of the McIntyre Building, Portsmouth, New Hampshire. Project manager responsible for the design and facilitation of a comprehensive public outreach process to give all citizens a voice in identifying the elements essential to a successful redevelopment of the Thomas J. McIntyre Building site in downtown Portsmouth. Worked with the city to develop and refine the information and graphic content presented and discussed at each public engagement session. The four-month process included several Steering Committee meetings in addition to the seven formal public engagement sessions.

Sanford Mill Redevelopment Conceptual Master Plan, Sanford, Maine. Landscape architect for this Brownfields redevelopment site. Worked with the city's officials to create conceptual plans and sketches to support the Community Development Block Grant effort to secure funding for the design and construction of the mill-area infrastructure redevelopment. Developed a conceptual master plan diagram that showed potential locations for a new riverwalk amenity, fishing and launching piers, community garden areas, a new public safety building, and the proposed alignment for the mill-area "Main Street."

Master Plan & Implementation for Prescott Park, Portsmouth, New Hampshire. Project manager for the creation of a strategic master plan and implementation design for historic waterfront Prescott Park and nearby Four Tree Island. Performed a thorough site analysis, conducted an extensive public input and participation program, and developed a comprehensive master plan and facilities plan that identified achievable renovation and restoration strategies and solutions for a revitalized, resilient park.

Eastman Conservation Area Improvements & Trails, Needham, Massachusetts. Team leader for the design of upgrades at the Newman School for the Eastman Conservation Area, an outdoor learning laboratory with a varied landscape that includes wetlands, meadows and streams, open bodies of water, uplands, and rock outcroppings. Efforts included the design of boardwalks, at-grade trails, overlooks, piers, and a wide range of other site amenities that help to support the storytelling about wildlife and other environmental features that are unique to this rich and varied conservation landscape. The project also involved the design and construction of new athletic fields at the school.

Moakley Park Master Plan, Pre-Project Initiation, Vision Plan, & Schematic Design Verification, Progressive Development, and Governance, Boston Parks and Recreation Department (BPRD), Boston, Massachusetts. Responsible for senior technical review, construction feasibility, and client coordination for Weston & Sampson's role (as subconsultant to Stoss) for the advancement of the vision plan for Moakley Park, the largest waterfront park in Boston, which is increasingly vulnerable to flooding due to climate change. Follow-on efforts involved Weston & Sampson leading the schematic design and implementation efforts.

Chinatown Transformation Project – Streets and Sidewalks, Boston Public Works Department (BPWD), Boston, Massachusetts. Design discipline lead in support of this 2024 project involving the development of a plan that will identify opportunities to transform the streets and sidewalks of the Chinatown neighborhood and create more safe, functional, and inviting urban spaces. Responsible for community and stakeholder engagement to drive consensus building, urban design services, permitting and procurement support, and construction oversight.



JOHNATHAN I AW

BACKGROUND

2022-Present Team Leader Weston & Sampson

2021-2022 Senior Project Manager Weston & Sampson

> 2013-2021 Senior Associate IBI Placemaking

2007-2013 Associate IBI Placemaking

2004-2007 Senior Landscape Architect IBI Placemaking

> 2001-2004 Landscape Architect IBI Placemaking

EDUCATION

2000

Leeds Metropolitan University Graduate Diploma in Landscape Architecture (Distinction)

1998

Leeds Metropolitan University Bachelor of Arts in Landscape Architecture (First Class Honors)

PROFESSIONAL AFFILIATIONS

Town of Wellesley Design Review Board, Chairman April 2014-March 2018

Town of Wellesley Design Review Board, Member, February 2010-2014

AWARDS

2023

Merit Award in Design for the UMass Amherst Campus Core Revitalization with Arcadis Boston Society of Landscape Architects

2023

Plan NH Merit Award of Excellence with Honor for the Rethinking Pleasant Street | City of Claremont with IBI Placemaking Johnathan is a Team Leader at Weston & Sampson with more than 22 years design and construction experience within the field of landscape architecture. He has played a key role on a range of streetscape, university campus planning, and open space improvement projects throughout New England, merging his design and technical expertise to create award-winning results. He has extensive experience in public engagement and has successfully obtained approvals for projects in the public and private sectors. Throughout his career, he has focused on creating strong relationships with clients within the private and public sectors.



SPECIFIC PROJECT EXPERIENCE

200 Berkeley Street, Boston, Massachusetts. Project manager and lead designer working with ownership, local architects, and city agencies to design a new streetscape with a focus on pedestrian accessibility improvements and gathering areas for an office building located in downtown Boston. The concept designs used our on-site analysis of how visitors enter and exit the building to help inform the location for new seating and paving. The paving designs help to navigate people to the main building entrance and visually create a sense of arrival. The addition of the raised granite planters incorporate seating and planting offers a place for respite. The trees help provide some human scale adjacent to the building and the low-maintenance perennial and shrub planting provide color and texture. Worked collaboratively with Boston Disabilities Commission to provide improved ADA accessibility along the building frontage, including adding a constant 8-foot-wide concrete sidewalk and new accessible curbs ramps at each intersection.

Master Plan for 425 Medford Street, The Flatley Company, Charlestown, Massachusetts. Project Manager and lead designer for a master planning effort for a 55-acre waterfront site. This mixed-use housing and retail/commercial development prioritizes addressing existing and future site flooding from predicted sea level rise and climate change by incorporating a resilient flood barrier within a system of new public open spaces. The master plan design will incorporate a range of new public open spaces that connect to the existing neighborhood/community and the newly created waterfront park. Sustainability is a key component of the overall design, with a focus on stormwater management and the reduction of the urban heat island effect. This master plan is also designed to be universally accessible to all users, with a focus on complete street principles.

Downtown Revitalization Master Plan, Northborough, Massachusetts. Project goals include reducing the existing road diet and providing access for vehicles, bikes, and pedestrians in equal measure. Enhanced pedestrian connections to downtown and the surrounding trails and open space are paramount to the success of this master plan. A new flexible public plaza with green open spaces will become the new heart of downtown. Responsible for also leading the public engagement with residents, a steering committee and local business owners.



JOHNATHAN I AW

AWARDS (CONT.)

2018

Merit Award in Design for The Innovation and Design Building Boston Society of Landscape Architects

2017

ITE Complete Streets Council Best Project Award for Concord Main Street Improvements, Concord, NH with McFarland Johnson

2017

Project of the Year for Concord Main Street Improvements, Concord, NH with McFarland Johnson

New Hampshire Planners Association

2017

Preservation Achievement Award for Concord Main Street Improvements, Concord, NH with McFarland Johnson New Hampshire Preservation Alliance

2017

Public Works Project of the Year for Small Cities/Rural Communities, Transportation Category for Concord Main Street Improvements, Concord, NH with McFarland Johnson American Public Works Association

2017

ACEC-NH Gold Engineering Excellence Award for Concord Main Street Improvements, Concord, NH with McFarland Johnson

2017

Bronze Award for Engineering Excellence for UMass Boston University Hall Massachusetts Chapter of the American Council of Engineering Companies

2014

MIPIM Architectural Review Future Project Awards, Big Urban Projects for PaoJiang Lake, China with Paul Lukez Architecture

2013

Urban Design Award for Paojiang Lake Master Plan, Shoaxing, China with Paul Lukez Architecture World Architecture News (WAN) Excel Dryer World Headquarters, East Longmeadow, Massachusetts. Project manager for this project to transform this existing office building for Excel Dryer. The goal is to create an outdoor amenity terrace for staff to enjoy throughout the day. Granite pavers help to define the new terrace which is designed with flexibility in mind. A combination of fixed and movable seating provides numerous opportunities for gathering. A rain garden will help mitigate stormwater run-off whilst providing a visually pleasing backdrop. A mixture of native plantings and ornamental grasses soften the plaza against the existing landscape and provide users with privacy from the existing parking lot.

Main Street Improvements, Concord, New Hampshire. Project manager for the design effort for this new downtown streetscape in collaboration with the project engineers. Through an extensive public process which included several presentations to the city council, stakeholders, and residents, achieved consensus on the preferred design approach for Main Street. One of the goals of the revitalization project was for it to serve as a catalyst for the regeneration of Concord's retail core. By creating an attractive, comfortable, safe, vibrant, and sustainable setting, as well as a destination for residents and visitors alike, the improvements have aided in preserving and enhancing the economic vitality of downtown Concord. This was accomplished by reducing the vehicular travel lanes from four to two, considerably widening the sidewalks, and creating communal spaces that can facilitate public art, small pocket parks and social gatherings. Universal access has been provided to all buildings along the street. New lighting enhances pedestrian safety and creates a more vibrant environment. Main Street is viewed as a "Complete Street," not simply as a transportation corridor. It can now accommodate pedestrians, drivers, and transit users in equal measure. It has already been embraced by the Concord community, recently receiving a "Best of NH" recognition. (with previous employer)

Pleasant Street Improvements, Claremont, New Hampshire. Project manager and lead designer who worked closely with the engineers, City of Claremont, and the community to develop a design that addresses function, aesthetics, and infrastructure needs for this important downtown street. Conceptual designs were produced for review and a preferred alternative was selected to develop further. Important design components of the new street included the use of resilient materials, widened sidewalks that meet ADA requirements, new tree plantings, improved pedestrian crossings and seating areas, and the selection of site amenities. Led the production of the construction documents. Construction began in the summer of 2021 with planned completion the following summer. This project was recognized with the 2023 Plan NH Merit Award of Excellence with Honor. (with previous employer)

Downtown Streetscape, Leominster, Massachusetts. Project manager for leading the team through a master planning process and subsequent conceptual streetscape design for the downtown. The team reviewed curb layouts and parking and provided multiple design options and 3D photo realistic renderings. The team developed streetscape design guidelines to create a cohesive visual language for Leominster in all future work. Following on from this Master Plan, the city hired the firm to prepare construction documents for the Monument Square urban park. Led the design and internal team on this project. Solely responsible for assembling the design team and for bringing both projects into the office. (with previous employer)



BACKGROUND

2023-Present Senior Project Manager Weston & Sampson

> 2017-2023 Project Manager Weston & Sampson

> 2013-2017 Project Engineer Weston & Sampson

> 2005-2012 Engineer Weston & Sampson

EDUCATION

2005

Bachelor of Science
Civil Engineering
University of New Hampshire

PROFESSIONAL REGISTRATION

Professional Engineer: Massachusetts (#49074)

Licensed Soil Evaluator, Massachusetts No. 12686

PROFESSIONAL SOCIETIES

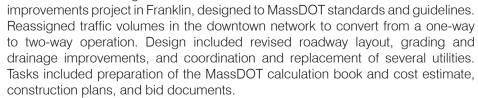
Women's Transportation Seminar American Council of Engineering Companies

HONORS

2012 New England Water Environment Association Young Professional Award Alyssa is a senior project manager in Weston & Sampson's civil site/transportation programs. Her responsibilities include roadway, parking, septic, and stormwater management design; soil evaluations and percolation tests; development of site layout plans and building concepts for municipal, educational, recreational, and Department of Public Works (DPW) facilities; contract document preparation; surveying; permitting; and AutoCAD services.

SPECIFIC PROJECT EXPERIENCE

Downtown Roadway Improvements, Franklin, Massachusetts. Engineer for the downtown



Site Improvements at Babson College, Wellesley, Massachusetts. Engineer for several improvements projects at Babson College including the Hill Residence master plan, Knight Memorial Building storm drainage, master plan for the President's Residence, Knight Auditorium parking area, Coleman Hall final construction design, Trim Lot refurbishment, and Nichols Hall site improvements projects. Incorporated several design components, including site layout, grading, drainage, and site utilities, and prepared bid plans and specifications. On-site responsibilities included existing conditions surveys, soil evaluations and Geoprobe subsurface investigations, and construction administration tasks.

Parking Lot Improvements, University of Massachusetts Lowell. Provided site/civil engineering assistance for the UMass Lowell Cumnock parking lot refurbishment project.

Kendall Square Improvements, On-Call Contract, Cambridge, Massachusetts. Project engineer for the design and implementation of Complete Streets-type multi-modal transportation improvements along Broadway, between First and Ames streets in Kendall Square, including major streetscape upgrades, bicycle lanes, turning lanes, taxi queuing areas, a bus turnaround, and major pedestrian circulation improvements. Conducted work to meet ADA accessibility standards and MassDOT criteria.

School Street Roadway Reconstruction, Barnstable, Massachusetts. Engineer for the School Street roadway reconstruction project, which included the full design of approximately one mile of roadway in conformance with MassDOT specifications and guidelines.

Corporation Street and Enterprise Road Reconstruction, Barnstable, Massachusetts. Engineer for the design of approximately 2,300 linear feet of roadway and sidewalk. Prepared construction plans and profile, grading and drainage plans, and construction details.



Infrastructure Improvements to Cedar Street, Somerville, Massachusetts. Civil engineer for the design of infrastructure improvements to alleviate flooding on Cedar Street. Performed a comprehensive investigation of the existing utilities on the street to identify all connections into the sewer and combined sewer system. Tasks also included the design of a new trunk drain, as well as complete streets surface treatments.

School Street Roadway Reconstruction, Barnstable, Massachusetts. Engineer for the School Street roadway reconstruction project, which included the full design of approximately one mile of roadway in conformance with MassDOT specifications and guidelines.

Corporation Street and Enterprise Road Reconstruction, Barnstable, Massachusetts. Engineer for the design of approximately 2,300 linear feet of roadway and sidewalk. Prepared construction plans and profile, grading and drainage plans, and construction details.

Herring Brook Road Roadway Reconstruction, Eastham, Massachusetts. Engineer for the grading and drainage services and preparation of construction plans and bid documents.

Sterling Town Center Revitalization, Sterling, Massachusetts. Project manager for the downtown roadway improvements project. Design includes hydraulic analysis of the project area, revised roadway and sidewalk layout, grading and drainage improvements, and water line replacement. Tasks include preparation of construction plans and specifications, construction cost estimate, and bidding phase services.

Ayer Rail Trail Parking Facility, Montachusett Regional Transit Authority, Ayer, Massachusetts. Project manager for the development of approximately 200 parking spaces by constructing a new elevated precast concrete parking deck and redesigning at-grade-parking. Project includes studying multiple site and parking deck alternatives with construction cost estimates.

Parking Garage Addition Phase IV East - Boston Planning & Development Agency, Boston, Massachusetts. Providing civil/site engineering support for the design and construction of a 550+ parking garage addition to the parking structure at the Raymond L. Flynn Marine Park in Boston.

Billerica Town Hall Parking Lot Design, Billerica, Massachusetts. Project manager for the design and expansion of parking at the Town Hall and Police and Fire Stations. The design includes several parking layout alternatives, grading, utility design, and electric vehicle charging. The project includes preparation of construction plans and specifications, and construction cost estimates.

Carey Street Parking Improvements, Fitchburg, Massachusetts. Project manager for the design of parking at Montachusett Regional Transit Authority's headquarters building. The design of the new parking area included grading and drainage improvements and site utilities. Tasks included preparation of construction plans and specifications, construction cost estimate, bidding phase services, and construction administration.



BACKGROUND

2024-Present Associate Weston & Sampson

2022-2024 Practice Leader Weston & Sampson

2020-2021 Senior Team Leader Weston & Sampson

2018-2020 Team Leader Weston & Sampson

2017-2018 Project Manager Weston & Sampson

2014-2017 Landscape Architect Weston & Sampson

2012-2014 Landscape Architect Copley-Wolff Design Group

> 2012 Landscape Architect The Cecil Group

2011-2012 Landscape Architect Independent Consulting

2007-2011 Landscape Architect/Associate DLR Group

> 2005-2007 Landscape Designer Geller Devellis Inc.

2003-2005 Assistant Landscape Designer

Mia Lehrer and Associates

2001-2003 Assistant Landscape Designer Geller Associates

EDUCATION

2001 chitecture

Bachelor of Landscape Architecture University of Rhode Island

PROFESSIONAL REGISTRATION

Registered Landscape Architect: Connecticut No. LAR.0001609 Brandon is an associate with more than 20 years of experience in innovative design and master planning. His areas of expertise include athletic field and court complex master planning and design, urban parks, academic and corporate campuses and natural resource conservation and rehabilitation. He has managed projects associated with planning land use area development, including work with sensitive and complex issues related to environmental concerns, sustainability, and historic preservation. Brandon routinely collaborates with public officials, state agencies, and external consultants on multiple projects concurrently.



SPECIFIC PROJECT EXPERIENCE

Downtown Visioning and Connectivity, Portsmouth, New Hampshire. Provided support for the Vaughan Mall visioning initiative that involved a review of the existing zoning requirements and possible build-out scenarios for city-owned parcels to revitalize the downtown and repurpose surface parking lots to create a more pedestrian- and retail-friendly environment. Project efforts included identifying key priorities from the city-wide master plan and an evaluation of ways to implement pedestrian connectivity, urban design/planning, urban forestry, and visioning.

Langone Park and Puopolo Playground, Boston Parks and Recreation (BPRD), Boston, Massachusetts. Project manager responsible for working with the BPRD to develop final designs, obtain permits, and provide construction administration for the complete refurbishment of this signature waterfront park in Boston's historic North End. The recreational lifeline for Boston's most densely developed community, the park also provides a critical link within Boston's Harborwalk network. Design efforts included lighting, benches, interpretive signage conveying the unique historical and environmental heritage of this site, and climate/coastal resilient strategies. This multi-award-winning park/open space project is the first in the city designed with climate-resilient features embedded throughout to protect the park's shoreline, the neighborhood, and other public assets from projected sea level rise and an increase in storm events.

Redevelopment of Ryan Playground, Boston Parks and Recreation (BPRD), Boston, Massachusetts. Project manager responsible for leading the interdisciplinary study, engineering, and landscape architecture related to the redevelopment of Ryan Playground, located on a post-industrial, waterfront site. From on-site contamination resulting in an Activity and Use Limitation (AUL) to existing utility easements and a vibrant active recreation program, the redesign will multi-task every capital dollar invested. Efforts to realize the new, resilient park will include ground improvements, sea wall modifications, Harborwalk renovation, and a reconfigured site that makes best and highest use of the available land to fend of rising tides, while reducing heat island effects through a smart urban forestry approach.



BRANDON KUNKEL, RLA

Maine No. LAR5342 Massachusetts No. 4040 New Hampshire No. 00214 Rhode Island No. LA.0000735

PROFESSIONAL SOCIETIES

American Society of Landscape Architects (ASLA, BSLA)

Council of Landscape Architecture Registration Board (CLARB) Cypress Street Playground & Athletic Field Improvements, Brookline, Massachusetts. Served as project manager for field and playground improvements after Weston & Sampson's environmental professionals completed a Phase 1 assessment. Responsible for leading the design team through park redesign and construction, including a children's playground with universally accessible equipment, splash pad, plaza spaces, basketball court area, and multi-use natural turf playing field, and lighting. Project efforts included strategically incorporating new irrigation for the park, green infrastructure techniques to promote on-site infiltration, a new planting plan, and well-designed circulation and gathering spaces into the design process in response to public needs.

Master Plan Development for Cannery Wharf Park, Provincetown, Massachusetts. Project manager for the development of a comprehensive master plan for a high-visibility waterfront parcel off busy Commercial Street in Provincetown. Efforts include an existing conditions analysis and site observations, conceptual plans, development of a preferred plan, climate-resilient design considerations, and a robust public participation program.

Mill Creek Boardwalk, Chelsea, Massachusetts. Principal for the preliminary design of 650-feet of boardwalk at Mill Creek between 88 Clinton Street and Broadway. This multi-disciplinary project will manage hazardous materials associate with urban fill, soft marine bedding materials, coastal zone permitting, and demanding land rights acquisition conditions. The boardwalk system requires careful coordination with the landowner rights, community needs, and the city's vision for a connected, accessible waterfront. Weston & Sampson worked with the city to secure a MassTrails grant to fund this project.

Tom Nevers Road Bike Path Extension Feasibility Study, Nantucket, Massachusetts. Landscape architect for completion of a feasibility study for a bike path along Tom Nevers Road in 2020. The goal of the study was to determine and accessible walking and biking route to connect Milestone Road to Tom Nevers Park and Beach. The scope of work included an existing conditions and utility analysis, study of existing roadway/traffic conditions, environmental resource impacts, and determining and accessible route for the path. Weston & Sampson is now preparing the construction and permitting documents for the 2.1-mile Tom Nevers Bike Path Extension with construction anticipated to occur in 2024.

White Pond Beach Area Master Plan & Implementation, Concord, Massachusetts. Project manager for design, permitting, and construction administration of the improvements to the beach area. Improvements include universally accessible pathways, parking and traffic management improvements, a stormwater infiltration system, reforestation, boardwalk, and scenic overlook areas.

Pathway and Entrance Improvements at Boston Common and Public Garden, Boston, Massachusetts. Provided landscape architecture/project management services for pathway enhancements, including landscape site design/improvements and historic preservation/restoration to improve the pathways and entrances to the Boston Common, the Public Garden, and Commonwealth Avenue Mall. Responsible for completing a thorough assessment of existing entrance and pathway conditions and a prioritized improvement program. Efforts involved working closely with multiple stakeholders and the Boston Landmarks Commission.



BACKGROUND

2023-Present Project Landscape Architect Weston & Sampson

2020-2023 Project Landscape Designer Weston & Sampson

> 2020 Landscape Designer III Weston & Sampson

2019-2020 Landscape Designer II Weston & Sampson

2017-2019 Landscape Designer I Weston & Sampson

2016-2017 Sessional Staff Tutoring Royal Melbourne Institute of Technology

2014-2017 Landscape Architect Office of Urban Transformation Research

2013 Intern Landscape Architect STOSS Landscape Architecture

2010-2011 KEO International Consultants

EDUCATION

2015 Master of Landscape Architecture Royal Melbourne Institute of Technology

2014
Bachelor of Design
Landscape Architecture
Royal Melbourne Institute of
Technology

PROFESSIONAL REGISTRATION

Registered Landscape Architect Massachusetts No. 4440 Farah is a project landscape architect in Weston & Sampson's Boston office. She routinely prepares high-concept graphic representations, including 3D models and renderings of our design work, compiles detailed construction documents and specifications, assists engineers and scientists on multi-disciplinary projects, and incorporates green infrastructure and ADA accessibility design considerations. Her skills include proficiency in Rhinoceros 3D, AutoCAD, as well as Adobe InDesign and Photoshop software. In addition, Farah is fluent in both Arabic and English.



SPECIFIC PROJECT EXPERIENCE

Revitalization of Draw Seven Park, Massachusetts Department of Conservation & Recreation. Landscape designer for the revitalization of this signature park along the banks of the Mystic River in Somerville, Massachusetts. Work includes providing urban design/landscape architecture, sustainability/resiliency, utility infrastructure, waterfront engineering, environmental permitting, architecture, facilities planning, wayfinding, public participation, and cultural resource planning services to redesign and redevelop this high-visibility waterfront space into a climate-resilient park.

Renovations to McConnell Park, BPRD, Boston, Massachusetts. Landscape designer working on the redevelopment of this BPRD open space resource in the Savin Hill neighborhood of Dorchester. Park renovations include updating the active/passive recreation amenities and incorporating sustainable and resilient designs to mitigate the park's location in a susceptible inundation zone.

Cypress Street Playground & Athletic Field Improvements, Brookline, Massachusetts. Provided landscape design support for field and playground improvements after Weston & Sampson's environmental professionals completed a Phase 1 assessment.

Harambee Park Master Plan, Boston Parks and Recreation Department, Dorchester, Massachusetts. Landscape designer for the master planning of Harambee Park, one of the city's largest open space assets. Efforts included inventory and analysis of all park features, identification of deficiencies/safety hazards, soil/survey analysis, circulation analysis, athletic facilities assessment and recommendations, vegetation enhancement and management recommendations, a public participation program, and a detailed construction cost estimate for the recommended improvements.

Mary Ellen Welch Greenway, Boston, Massachusetts. Landscape designer responsible for community engagement and design development for improvements to the city-owned portion of the greenway. Upon completion, the design efforts will reflect the project goal of reducing near-term and long-term stormwater and coastal flooding.

Climate Resilience Guidelines, Boston Public Works Department, Boston, Massachusetts. Provided a landscape architecture perspective and support to translate conceptual ideas into feasible engineering and operational solutions that focus on protecting the city from the impacts of climate change.

DESIGN COMPETITIONS

2017

The Landscape Institute and Ecobuild Royal Docks Ideas Competition, Short-Listed Entry Farah Dakkak, Carl Hong, Brad Clothier

2012

Transitioning Cities Low Carbon Futures International Design Competition, Student Prize Farah Dakkak, Carl Hong, Brad Clothier

PROFESSIONAL AFFILIATIONS

Landscape Architecture Magazine Editorial Advisory Committee Malcolm X Park, Boston Parks and Recreation Department, Roxbury, Massachusetts. Landscape architect responsible for improvements to Malcolm X Park located in the city's Roxbury neighborhood. Responsibilities included improving accessibility throughout the park; designing recreation spaces for all ages; upgrading the basketball courts, playgrounds, and sports fields; and managing pandemic-related restrictions on public gatherings by reexamining and reimagining the project's robust community engagement program.

Langone Park and Puopolo Playground, Boston, Massachusetts. Landscape designer responsible for working with the Boston Parks and Recreation Department to develop final designs and obtaining permits for the complete refurbishment of this signature waterfront park in Boston's historic North End. Design efforts include lighting, benches, interpretive signage conveying the unique historical and environmental heritage of this site, and coastal resilient strategies.

Moakley Park Master Plan, Boston Parks and Recreation Department (BPRD), Boston, Massachusetts. Landscape designer supporting Weston & Sampson's role (as subconsultant to Stoss) for the advancement of the vision plan for Moakley Park, the largest waterfront park in Boston, which is increasingly vulnerable to flooding due to climate change.

Moakley Park Phase 1, Boston Parks and Recreation Department (BPRD), Boston, Massachusetts. Project Landscape Architect managing the landscape design of Phase 1 of Moakley Park. Project efforts include landscape architecture, climate resiliency, environmental, geotechnical, utility, and electrical engineering, as well as subconsultant collaboration, including work with Stoss on landscape design and schematic design verification and with Nitsch on stormwater engineering.

Redevelopment of Ryan Playground, Boston Parks and Recreation (BPRD), Boston, Massachusetts. Project landscape architect responsible for supporting the redevelopment of Ryan Playground, located on a post-industrial, waterfront site. Efforts to realize the new, resilient park will include ground improvements, sea wall modifications, Harborwalk renovation, and a reconfigured site that makes best and highest use of the available land to fend of rising tides, while reducing heat island effects through a smart urban forestry approach.

Universal Playground Design at Danehy Park, Cambridge, Massachusetts. Landscape designer for the design and construction of a new universal playground within the existing Danehy Park located in North Cambridge. The accessible playground includes accommodations for physical, sensory, and social needs. Park improvements also include a new water play area, site access/circulation, parking, and stormwater management.

Redevelopment of Riverfront Park, Springfield, Massachusetts. Landscape designer for the development of renovation/restoration strategies as part of a master plan for this riverfront property, including park upgrades and infrastructure improvements. Plans for redevelopment of the park include universal accessibility; site/pedestrian access and connectivity; horticultural and landscaping; an interactive water feature; and improvements to signage, performance spaces, lighting, and utility connections.



GRACIE SWANSBURG

BACKGROUND

2023-Present Site Designer II Weston & Sampson

2021-2023 Landscape Designer Weston & Sampson

2020-2021 Intern, Research and Landscape Design Practice Landscape

2020

Intern, Landscape Architecture IBI Placemaking

2019

Intern, Horticulture Newton Cemetery & Arboretum

2017-2018 Associate, Digital Communications and Marketing Ceres

ACADEMIC EXPERIENCE

2019

Graduate Research Assistant Harvard University Graduate School of Design

2018-2020 Project Lead Harvard Community Development Project

EDUCATION

2021 Master of Landscape Architecture Harvard University Graduate School of Design

2015

Bachelor of Arts, with honors Art History & Environmental Science Boston College

CONTINUING EDUCATION

2015 Summer Institute for Graphic Design Rhode Island School of Design Gracie is a landscape designer in Weston & Sampson's design practice. Her experience spans a broad range of scales, from master planning to streetscapes, and she strives to bring critical thinking and innovation to all her work. Her skillset includes resiliency, urban forestry, and relational design in public parks and open spaces.

SPECIFIC PROJECT EXPERIENCE

Master Plan for 425 Medford Street, The Flatley Company, Charlestown, Massachusetts. Landscape designer currently working with The Flatley Group on a master plan design for this



waterfront site. Responsibilities include schematic design, modeling the proposed site design, producing illustrative renderings and flythrough videos of the digital model for marketing and community engagement needs. This mixed-use housing and retail/commercial development prioritizes addressing existing and future site flooding from predicted sea level rise and climate change by incorporating a resilient flood barrier within a system of new public open spaces. The master plan design will incorporate a range of new public open spaces that connect to the existing neighborhood/community and the newly created waterfront park. Sustainability is a key component of the overall design, with a focus on stormwater management and the reduction of the urban heat island effect. This master plan is also designed to be universally accessible to all users, with a focus on complete street principles.

Redevelopment of Ryan Playground, Boston Parks and Recreation Department (BPRD), Charlestown, Massachusetts. Landscape designer currently working with BPRD on a master plan for the redevelopment of Ryan Playground, located on a post-industrial, waterfront site. Responsibilities include community engagement, conceptual design through construction development, and coordination with our team of subconsultants. From on-site contamination resulting in an Activity and Use Limitation (AUL) to existing utility easements and a vibrant active recreation program, the redesign will multi-task every capital dollar invested. Efforts to realize the new, resilient park will include ground improvements, sea wall modifications, Harborwalk renovation, and a reconfigured site that makes best and highest use of the available land to fend of rising tides, while reducing heat island effects through a smart urban forestry approach.

Forsyth Park and Historic Staircases, Chelsea, Massachusetts. Landscape designer currently working with the City of Chelsea for the creation of a strategic master plan and implementation design for historic Chelsea staircases and nearby Forsyth Park. Efforts include assisting on site analysis, producing a public input and participation program, and developing conceptual designs that will lead to a comprehensive master plan that identifies achievable renovation and restoration strategies and solutions for each site or pathway.

Consultant Services for Redevelopment of Route 1 Corridor Westerly, Rhode Island. Landscape designer currently working with the Town of Westerly on the redevelopment of the Route 1 Corridor. Responsibilities include assisting on the site assessment report.

GRACIE SWANSBURG

HONORS & AWARDS

2020-2021 Thesis Prize
Advised by Gary Hilderbrand
FASLA FAAR, Peter Louis Hornbeck
Professor in Practice
Selected by the Faculty of the
Department of Landscape
Architecture, Harvard GSD

Featured Project | Mexican Cities Initiative (MCI) Nominated by Montserrat Bonvehi Rosich and Seth Denizen for Thicken the Line

Nominee | ASLA Student Award, General Design Nominated by Danielle Choi and the LA Dept, Harvard GSD for *The* Circular City Walnut Street Senior Affordable Housing Development, Foxborough, Massachusetts. Landscape designer responsible for illustrative renderings and fly-through videos of the digital site model.

White Pond, Concord, Massachusetts. Landscape designer responsible for assisting on construction document drafting. Improvements include universally accessible pathways, parking and traffic management improvements, a stormwater infiltration system, reforestation, boardwalk, and scenic overlook areas.

Improvements to Louise Levingston Cove, Newton, Massachusetts. Landscape designer responsible for assisting on construction document drafting and Ch.91 permitting requirements. Work includes a robust public engagement program as well as the design of a cantilevered deck overlooking Crystal Lake, an on-grade deck at the shoreline, stormwater management, and slope stabilization strategies, pathway upgrades, and planting areas.

Clarendon Tot Lot, Boston, Massachusetts. Landscape designer responsible for assisting on construction document drafting.

Master Plan Development for Cannery Wharf Park, Provincetown, Massachusetts. Landscape designer responsible for assisting the development of a comprehensive master plan for a high-visibility parcel off of busy Commercial Street in Provincetown. Individual efforts include models and illustrative renderings for three conceptual plans, development of a preferred plan, and graphics presented at a robust public participation program.

Prescott Park, Portsmouth, New Hampshire. Landscape designer responsible for assisting on construction document drafting.

Wareham Dog Park, Wareham, Massachusetts. Landscape designer responsible for assisting on construction document drafting and construction administration.

Ell Pond Park, Melrose, Massachusetts. Landscape designer responsible for illustrative plan rendering. Plans for the park include synthetic and natural turf athletic fields, court improvements, walking paths, seating/gathering spaces, boardwalk/dock areas, stormwater management, parking improvements, etc.

Halliwell Memorial School, North Smithfield, Rhode Island. Landscape designer responsible for illustrative renderings.

Greenboro Road Outfall Improvements, Dedham, Massachusetts. Landscape designer responsible for assisting on construction document drafting and construction administration.



CASSANDRA BETHONEY, RLA

BACKGROUND

2022-Present Project Manager Weston & Sampson

2020-2021

Senior Project Landscape Architect Weston & Sampson

2017-2020

Project Landscape Architect Weston & Sampson

2016-2017

Associate Landscape Architect Sasaki

2013-2016

Landscape Architect Weston & Sampson

> 2012-2013 Design Intern

Landscape Architecture Weston & Sampson

2012

Community Service Fellow/Brownfields Program Intern US Environmental Protection Agency

2010

Landscape Architect Intern Olmsted Center for Landscape Preservation

2007-2010

Contract Landscape Designer The S/L/A/M Collaborative Architects and Engineers

2009

Landscape Intern The Fells Historic Estate and Gardens

EDUCATION

2013

Master in Landscape Architecture
Harvard University

2009

Bachelor of Science Landscape Architecture Ecological Design Concentration Cornell University Cassie is a Registered Landscape Architect with experience that spans a broad range of projects from planning to built work, with a focus on public parks and open spaces, streetscape design, and urban improvement projects. She has specialized skills in ecological restoration along waterways and stormwater detention basins, and she is interested in the role that an engaged public process plays in making vibrant landscape spaces. Cassie brings to each project strong critical thinking, pragmatism, and a commitment to quality.



SPECIFIC PROJECT EXPERIENCE

Prescott Park Implementation Plan and Phase 1 Improvements, Portsmouth, New Hampshire. Project manager for the enabling engineering phase of work following the approval of the Prescott Park Master Plan. Currently the project manager for the Phase 1 improvement scope. Work includes managing a multidisciplinary team of architects and engineers and developing a research-based approach to resiliency design that can improve flooding conditions for the neighborhood in the future.

Restoration of John Harvard Mall, Charlestown, Massachusetts. Landscape architect for the development of a master plan and design for the restoration of this historic park/plaza in the Charlestown neighborhood. Work included a robust community involvement program, new pavement treatments, an inclusive playground, accessible routes through the site, a redesigned park entrance, and sustainable design solutions.

Commonwealth Avenue Mall | Kenmore Block Master Plan, Friends of the Public Garden, Boston, Massachusetts. Project manager and lead landscape architect for the development of a community-driven master plan and implementation of the last block on Commonwealth Avenue, located within Kenmore Square. Now in design and slated for construction in 2024, currently managing the complex documentation process for proposed improvements, as well as coordination with the MBTA, city agencies, and adjacent improvement projects.

Fallon Field Playground, Roslindale, Massachusetts. Led the design effort for this playground improvement project, which includes many non-traditional play elements, universal accessibility throughout, and the tallest slide structure in Boston (now an iconic park feature). Was instrumental to the community outreach process with Roslindale residents, obtaining input to create an innovative playground space, built into a hillside. Also completed construction documentation for bidding.

Public Outreach Facilitation | Redevelopment of the McIntyre Building, Portsmouth, New Hampshire. Facilitated a comprehensive public outreach process to give all citizens a voice in identifying the elements essential to a successful redevelopment of the Thomas J. McIntyre Building site in downtown Portsmouth. Worked with the city to develop and refine the information and graphic content presented and discussed at each public engagement session. Prepared written meeting summaries for posting to the city's website and for use as the "essential framework" for the city and development team for design development.



CASSANDRA BETHONEY, RLA

EDUCATION, CONT.

2008

Art History Study Abroad Florence University of the Arts, Italy

PROFESSIONAL REGISTRATION

Registered Landscape Architect Massachusetts, No. 4209

PROFESSIONAL AFFILIATIONS

Design Review Commission Member Town of Franklin, Massachusetts

> Employer Advisory Board Boston Architectural College Practice Department

HONORS & AWARDS

2009

American Society of Landscape Architects Award of Merit

PRESENTATIONS

June 2022

"Inspiring and Transformative Approaches to Climate Adaptation" City Parks Alliance Greater Greener Conference Philadelphia, Pennsylvania Open Space and Recreation Plan Update, Yarmouth, Massachusetts. Project manager for the development of a comprehensive update to the town's Open Space and Recreation Plan (OSRP). Efforts will include an inventory of existing assets, a robust community engagement program, needs analysis, establishment of an achievable Action Plan, mapping, and development of draft and final reports.

Town Hall Plaza Improvements, Arlington, Massachusetts. Project manager and landscape architect for surgical improvements to historic civic space at Arlington's Town Hall. The Robbins Town Hall property is an Olmstedian landscape, so careful attention to detail and appropriate material selections were of paramount importance. Responsible for establishing a scope of work that celebrated this vibrant public space, established safe and accessible pedestrian connections, and corrected the long-standing drainage issues that were heaving the plaza from underneath. All improvements were presented before and approved by Arlington's Historic Commission.

Boston Common and Boston Public Garden, Boston, Massachusetts. Provided landscape architecture services for this high-profile improvement project that involved researching site history and performing pavement investigations, pathway construction, and achieving ADA accessibility in all areas.

Boston Common Master Plan, Boston, Massachusetts. Project manager for the development of a master plan for improvements to the historic Boston Common, located in the heart of downtown Boston. Developed and implemented a robust public engagement plan that connected every neighborhood with the Common and worked with a range of stakeholders to inform the recommendations included in the master plan.

North Union Spray Park and Hibbert Playground, Arlington, Massachusetts. Developed separate park design concepts, presented improvement plans, received input at community meetings, and produced construction documents as part of a commission to re-imagine two public open spaces to meet the varied needs of the community and the distinct site conditions at each location. Also led the construction oversight tasks at these two parks.

Lowe Playground, Fitchburg, Massachusetts. Assisted with on-site community presentations, led construction documentation efforts, and performed construction oversight for this playground, featuring new state-of-the-art playground equipment, ADA accessibility, and shade trees as part of a state grant.

Eastman Conservation Area Improvements & Trails, Needham, Massachusetts. Landscape architect for design of upgrades for the Eastman Conservation Area, an outdoor learning laboratory with a varied landscape that includes wetlands, meadows and streams, open bodies of water, uplands, and rock outcroppings. Work included design of boardwalks, at-grade trails, overlooks, piers, and a wide range of other site amenities that help to support the storytelling about wildlife and other environmental features unique to this rich and varied conservation landscape.



JEFFREY SANTACRUCE, PE, PTOE

BACKGROUND

2022-Present Senior Team Leader Weston & Sampson

2018-2022 Senior Project Manager Weston & Sampson

2011-2018 Project Manager McFarland Johnson, Inc.

> 2010 Project Engineer Kleinfelder/SEA

2002-2009 Project Manager Greenman-Pedersen, Inc.

1997-2002 Access and Utility Supervisor New Hampshire DOT Highway Maintenance District 5

EDUCATION

1994

Bachelor of Science, *cum laude*Civil Engineering
University of New Hampshire

PROFESSIONAL REGISTRATION

Professional Engineer:
Massachusetts No. 50065
New Hampshire No. 10650
Connecticut No. 0030580
Vermont No. 91133
Maine No. 13637
Florida No. PE85994
South Carolina No. 36732
North Carolina No. 048917
Delaware No. 24804

Professional Traffic Operations Engineer #4394

> Traffic Control Supervisor Florida #46880

Local Public Agency Certification Training (#1038) NHDOT Jeff has nearly 30 years of transportation and traffic engineering, design, management, and permitting experience on a wide variety of public and private projects. He has worked on rural, urban, and interstate roadway and traffic design projects, roadway reconstructions, traffic calming strategies, roundabouts, safety improvements, and Complete Streets. He also has experience in the management of interdisciplinary projects, cost estimating, QC/QA, constructability reviews, construction administration, and is adept at communicating and developing consensus with community stakeholders the during public engagement process.



SPECIFIC PROJECT EXPERIENCE

Hanscom Drive at Old Bedford Road – Vandenberg Gate Complex, Hanscom Air Force Base, Lincoln, Massachusetts. Project manager responsible for overseeing the design, permitting, and construction of a \$15M design-build project to construct a new Entry Control Facility at the base entrance. Work includes the relocation of approximately 1,500 feet of Hanscom Drive, construction of a new single lane roundabout at the intersection of Hanscom Drive and Old Bedford Road, and construction of three new buildings. The work also includes construction of new bicycle lanes, sidewalks, shared use paths, and new bus stop facilities. Project efforts also include the design of major drainage improvements to provide infiltration and improved water quality, as well as coordination with several federal and state agencies including ACOE, National Parks, and MassDOT.

Beacham Street and Williams Street Roadway Improvements, Chelsea, Massachusetts. Traffic engineer responsible for the analysis and design of improved operations and safety including revisions to horizontal and vertical alignments, redesign of several unsignalized intersections to improve access and safety and upgrading the existing traffic signal at the intersection of Spruce Street and Williams Street to include new equipment, lane assignments and refined geometry to improve operations and safety. Work along this corridor also includes the construction of a shared use path and improvements to the existing sidewalks and crosswalks including ADA compliant ramps, improved streetscape, landscaping, street lighting, and the upgrade and replacement of the existing drainage system.

Carter Street and Everett Avenue Improvements, Chelsea, Massachusetts. Traffic engineer responsible for traffic engineering design of the proposed intersection improvements. Work includes traffic signal upgrades such as APS pedestrian signal, sidewalk upgrades, new crosswalks, new pavement markings, bicycle accommodations including bicycle boxes and dedicated bike lanes, ADA compliant sidewalk ramps, drainage improvements and many new streetscape improvements including new energy efficient.



JEFFREY SANTACRUCE, PE, PTOE

PROFESSIONAL AFFILIATIONS

Institute of Transportation Engineers, New England Section (Junior Director of the Executive Board, 2019-Present)

> New Hampshire Institute of Transportation Engineers (Past President, 2016-2017)

Hanover Street Improvements, Lebanon, New Hampshire. Project manager responsible for providing preliminary design and engineering services for roadway improvements along a 2,300-foot stretch of Hanover Street. Work included evaluating the operations and geometric layout of three existing intersections, including Route 120 at Hanover Street, High Street at Hanover Street, and Mascoma Street at Hanover Street. This evaluation was based on Complete Street techniques that can accommodate all users, including pedestrians, bicyclists, vehicles, and transit riders. The project will also include reviewing the existing underground utilities for repair, upgrade, or replacement, and provide improvements to the existing stormwater system. As part of the design process, up to three alternatives for the corridor will be considered including intersection realignment/geometric improvements, traffic signal installation, and roundabouts. Will also evaluate up to three roadway improvement alternatives including one with minimal utility replacement and minimal roadway work, one that provides a fully functional Complete Street with major utility replacement, and one that includes pedestrian and safety improvements with some utility repair and replacement. All alternatives included the preparation of opinions of probable construction costs for submission to the city as part of the decision-making process. Will also lead a robust public engagement process to gain input and consensus from the public on the project.

Downtown Redevelopment, Millbury, Massachusetts. Traffic engineer responsible for traffic engineering design of the proposed downtown roadway and streetscape improvements. Work includes traffic signal upgrades including APS pedestrian signal, sidewalk upgrades, new crosswalks, new pavement markings, bicycle accommodations, ADA compliant sidewalk ramps, drainage improvements and many new streetscape improvements including new energy efficient lighting, trees, concrete pavers, benches, and a kiosk.

NHDOT Alton-Gilford Corridor Study, Alton & Gilford, New Hampshire. Project manager for the traffic analysis portion of this project for NHDOT, which includes the development of design alternatives along the entire corridor to provide operational and safety improvements. A safety analysis for all of the intersections along the corridor including a review of crash data, sight lines, pavement markings and signing was performed. Alternatives considered inclusion of bike lanes and sidewalks, horizontal and vertical alignment improvements, and several intersection improvements. Three major intersections were further studied including reviewing left turn warrants, reviewing traffic signal warrants and providing operational analysis of roundabout. Responsible for attending numerous Corridor Advisory Committee meetings with NHDOT in support of the project.

Downtown Main Street Complete Street, Concord, New Hampshire. Traffic engineer responsible for traffic engineering analysis and design of the signal intersection improvements, as well as review of all pavement marking and sign installation. Project involved converting Main Street's four-lane vehicular roadway to a two-lane roadway with wide lanes to accommodate bicycles and enlarged sidewalks with prominent bump-outs, new lighting, and LED Blank-Out panels with a "No Right Turn" indication to increase pedestrian safety. (with former employer)



DOUGLAS OSTLER, PE, PTOE

BACKGROUND

2023-Present Senior Project Engineer Weston & Sampson

2021-2023 Transportation Engineer Commonwealth Engineers & Consultants, Inc.

> 2021 Traffic Engineer WorldTech Engineering

2019-2020 Traffic Engineer City of Scottsdale, AZ

> 2016-2019 Traffic Engineer CivTech, Inc.

2013-2016 Engineer-In-Training CivTech, Inc.

EDUCATION

2013
Master of Science
Civil, Environmental, and
Sustainable Engineering (M.S.E.)
Arizona State University

2012 Bachelor of Science, cum laude Civil Engineering Arizona State University

PROFESSIONAL REGISTRATION

Professional Engineer: Massachusetts No. 56814 Rhode Island No. PE.0014143 Connecticut No. PEN.0037153

Professional Traffic Operations Engineer (PTOE) No. 5,036

International Municipal Signal Association (IMSA) Work Zone Temporary Traffic Control Technician Traffic Signal Technician I

PROFESSIONAL AFFILIATIONS

Institute of Transportation Engineers

Doug is a professional engineer and is a certified professional traffic operations engineer with over 11 years of experience in transportation engineering. Doug's early experience included both private consulting and with the City of Scottsdale, Arizona where he earned his BSE and MSE degrees in engineering. Doug also has years of experience consulting for local and state departments of transportation in the New England region. Doug has worked on varying projects including bridge replacements, complete streets restriping, road network connectivity changes, master plan studies, traffic simulations, road safety audits, and traffic control and speed studies. Doug has



extensive experience with school circulation and enjoys implementing systematic improvements for non-vehicular travel modes for safe routes to school.

SPECIFIC PROJECT EXPERIENCE

Peer Review for 94 Black Horse Lane, Cohasset, Massachusetts. Reviewed a planned housing development project. Evaluated transportation components of the site with respect to MassDOT guidelines and established requirements by the town. Provided comments within memorandum provided to the town for consideration by the jurisdiction's Design Review Board.

Peer review for Eastern Waste Services LLC, Gloucester, Massachusetts. Reviewed a proposed waste and recycle transfer station. Evaluated transportation components of the proposed facilities expansion and accompanying traffic study.

Route 213 Bridge Replacement over Methuen Rail Trail, Methuen, Massachusetts. Traffic engineer for this project under Weston & Sampson's Master Service Agreement with MassDOT. Work involves the design for the replacement of two bridges on Route 213 East/Westbound over the existing Methuen Rail Trail. Work also includes geotechnical evaluation, bridge replacement alternative analysis, preparation of a functional design report, development of traffic management plans and structural design.

Spruce Street Engineering Services, Chelsea, Massachusetts. Provided conceptual transportation corridor enhancements for improved multi-modal utility and safety as part of a city effort to revitalize the region. Considerations were made in conjunction with intended transit improvements including the extension of the silver line bus route which currently terminates adjacent to Spruce Street.

Truck Exclusion Engineering Study, Northborough, Massachusetts. Traffic engineering performing the engineering analysis and study preparation for a truck exclusion request for two roadways. The study is based on the requirements set forth in the Massachusetts Manual of Uniform Traffic Control Amendments.

Route 146 Reconstruction, North Smithfield, Rhode Island. Improvements along 8 miles of Route 146 including a half diverging-diamond interchange at Route 146A and a new grade-separated tight diamond interchange at Sayles Hill Road. Reviewed alternative design proposals as a consultant for RIDOT. (with former employer)



DOUGLAS OSTLER, PE, PTOE

(ITE) Public Member

Gladstone Street School, Cranston, Rhode Island. Reconstruction of aged school facilities. Observed existing conditions, reviewed site design to improve site circulation conditions, and produce traffic study. Presented and addressed to staff questions and public comments at meetings. (with former employer)

Bridge Group 69E, East Providence, Rhode Island. Replacement of bridge carrying Pleasant Street over Ten Mile River. Produced traffic study for detour conditions, environmental justice memo, assisted in the production of general design and maintenance and protection of traffic plans. Oversaw detour conditions and recommended updates to traffic management strategies during construction. (with former employer)

Kingston Road Bridge, Richmond, Rhode Island. Replacement of bridge carrying Interstate-95 over Kingston Road. Staff engineer participating in environmental inspection of the work zone, noting issues to document and or report as deficient. (with former employer)

Concord Road (Route 126) over MBTA, Lincoln, Massachusetts. Replacement of bridge carrying Route 126 and a multi-use path over a Massachusetts Bay Transportation Authority's railroad line. Coordinated permanent and temporary easements and right of way plans for the project. (with former employer)

Essex Street Rehabilitation Functional Design Report, Lynn, Massachusetts. Resurfacing project of Essex Street outside of downtown Lynn. Engineer producing Functional Design Report and traffic analysis and report evaluating changes to along the corridor were evaluated including bike facilities, auxiliary turn lanes, parking, and intersection modifications. (with former employer)

Western Avenue Rehabilitation Functional Design Report, Lynn, Massachusetts. Resurfacing and corridor improvements to Western Avenue. Engineer producing Functional Design Report and traffic analysis and report and traffic analysis wherein multiple options for potential changes along the corridor were evaluated including sidewalk, bike lane, auxiliary turn lane, parking, and intersection modifications. (with former employer)



BACKGROUND

2022-Present Team Leader Weston & Sampson

2021-2022 Senior Project Manager Weston & Sampson

2015-2020 Senior Project Manager Bohler Engineering

2003-2015 Senior Project Manager David E. Ross Associates, Inc.

2001-2003 Assistant Town Engineer Department of Public Works, Westford, MA

> 1994-2000 Senior Engineer Weston & Sampson

EDUCATION

1994 Bachelor of Science Civil Engineering Worcester Polytechnic Institute

PROFESSIONAL REGISTRATION

Professional Engineer Massachusetts No. 45050

Massachusetts Licensed Soil Evaluator Jesse is a Team Leader in our Water Resources Group with more than 25 years of consulting and municipal civil engineering experience managing a wide variety of land development and capital improvements projects.

SPECIFIC PROJECT EXPERIENCE

Master Plan for 425 Medford Street, The Flatley Company, Charlestown, Massachusetts. Provided site/civil engineering and stormwater services for the master plan design for this waterfront site, in collaboration with The Flatley Company. This mixeduse housing and retail/commercial development



prioritizes addressing existing and future site flooding from predicted sea level rise and climate change by incorporating a resilient flood barrier within a system of new public open spaces. The master plan design will incorporate a range of new public open spaces that connect to the existing neighborhood/community and the newly created waterfront park. Sustainability is a key component of the overall design, with a focus on stormwater management and the reduction of the urban heat island effect. This master plan is also designed to be universally accessible to all users, with a focus on complete street principles.

Prescott Park Implementation Plan and Phase 1 Improvements, Portsmouth, New Hampshire. Provided civil engineering support for the enabling engineering phase of work following the approval of the Prescott Park Master Plan. For the Phase 1 improvement scope, responsibilities include scheduling infiltration testing and soil evaluation, reviewing preliminary grading and drainage designs, and preparing applicable engineering design drawings.

East Boston Resilience Technical Analysis, Boston Planning & Development Agency (BPDA). Responsible for providing project management support for schematic design scenarios through a review of existing conditions, engagement with neighborhood residents and other stakeholders, and resilience technical analysis for two waterfront sites in East Boston, Carlton Wharf and Lewis Mall. The goal of this project was to develop practicable and replicable solutions that meet resiliency goals despite site constraints and create more equitable access to the waterfront.

Infrastructure Improvements, Various Locations, Massachusetts. Designed over 110,000 feet of infrastructure improvements including, but not limited to, water mains, sewer mains, drain lines, pumping stations, storage tanks, and treatment plant modifications for numerous public and private clients. Responsible for preparing construction documents and cost estimates necessary for competitively bid municipal projects.

Construction Services, Various Locations, Massachusetts. Managed construction administration and provided resident inspection services for all phases of water treatment plant construction; water, sewer, and drain line installation; and water storage tank construction and rehabilitation.

Stenton Mill Redevelopment, WinnDevelopment, Sanford, Maine. Supporting Weston & Sampson's efforts as a civil engineer for the renovation and redevelopment of the Stenton Mill. Responsible for working with WinnDevelopment and a team of design consultants to create a new 96-unit residential community development.

Parker Street Civil Engineering and Permitting Services, Private Developer, Maynard, Massachusetts. Providing civil engineering and permitting services for site development in preparation for a new residential subdivision.

New England Homes for the Deaf (NEHD) Redevelopment, WinnDevelopment, Danvers, Massachusetts. Providing civil engineering support for the proposed expansion of the NEHD facilities. The project proposes construction of a new building within the limits of their existing facility and extensive site constraints. The new building will contain 140 affordable and age-restricted units. Site improvements are needed for parking, access, utilities, grading and drainage. Weston & Sampson is working with the development team to design, permit, and construct the new facility.

Salem State University South Campus Redevelopment, Avalon Bay and WinnDevelopment, Salem, Massachusetts. Providing civil engineering support for the proposed redevelopment of Salem State's South Campus. The project proposes construction of new market-rate, affordable housing as well as the historic adaptive reuse of existing campus buildings to create a 55+ community. Site improvements are needed for resiliency, parking, access, utilities, grading and drainage. Weston & Sampson is working with the development team to design, permit, and construct the new facilities.

Saint Mary's Center for Women and Children Redevelopment, Planning Office for Urban Affairs, Inc, Dorchester, Massachusetts. Providing civil engineering support for the proposed redevelopment of a portion of the St. Mary's facility. The project proposes the demolition of two existing structures and construction of a new building on the campus. The new building will contain 60 residential units, program space for the residents, and a parking garage. Site improvements are needed for access, utilities, grading and drainage. Weston & Sampson is working with the development team to design, permit, and construct the new facility.



RICHARD BRADFORD

BACKGROUND

2023-Present Project Engineer Weston & Sampson

2020-2022 Engineer II Weston & Sampson

2020-2020 Engineer I Weston & Sampson

2017-2020 Junior Civil Engineer Hayes Engineering, Inc.

EDUCATION

2017
Bachelor of Science
Civil and Environmental Engineering
University of Massachusetts Amherst

PROFESSIONAL REGISTRATION

Engineer-in-Training

PROFESSIONAL CERTIFICATIONS

UNH Stormwater Certification

Richard is a project engineer working in Weston & Sampson's Site Civil Engineering group primarily on the private development side. A certified EIT, he has experience using AutoCAD Civil 3D, HydroCAD, and GIS to aid in the design of a variety of site civil engineering projects.

SPECIFIC PROJECT EXPERIENCE

Curtis Apartments, Worcester, Massachusetts. Lead civil designer for the redevelopment of an affordable housing complex for the Worcester Housing Authority. Offered a complete redesign of the existing roadways which included realignment of



the existing corridors for a more efficient site layout, a new storm drain system, and a full utility and grading design. Addressed stormwater capacity issues within the right-of-way, improving the overall quality of infrastructure in the area.

Watson Place, Braintree, Massachusetts. Project engineer for the redevelopment of the former Braintree Electric Light Department (BELD) property. Offered a multifaceted redesign of the property and overcame complex site constraints. Conducted a highly detailed assessment of existing infrastructure to aid in the design process and transform an underutilized former industrial site into a riverfront gateway.

New England Homes for the Deaf (NEHD), Danvers, Massachusetts. Lead civil designer on the project for the addition of a new facility to the existing NEHD campus, a community offering housing and healthcare to the deaf, deafblind and hard of hearing individuals. Molded a new state of the art building into the existing site, requiring extensive analysis of existing site constraints and grading challenges.

Walnut Street Affordable Housing Project, Foxborough, Massachusetts. Project engineer on a new senior housing development project. Designed a loop access road and provided a comprehensive stormwater design utilizing infiltration basins with sediment forebays to provide water quality treatment and manage stormwater runoff produced by new impervious building and parking areas.





EDUCATION

University of Rhode Island, Kingston, RI 2009–2014 BLA in Landscape Architecture PLA MA/RI

TRAVIS KALBERER

SITEWORK ESTIMATOR

Travis is a senior sitework estimator at PM&C with over 15 years of industry experience. He is a registered landscape architect with experience in the private and public sectors. Travis has worked as both a designer and a construction project manager for sitework contractors. This unique perspective helps him understand the nuances of projects and successfully deliver accurate informed estimates. His insight is highly valued by owners and designers.

RELEVANT PROJECT EXPERIENCE:

- University Park, Worcester MA
- Bourne Community Park, Bourne MA
- Buttonwood Park & Zoo, New Bedford MA
- Hynes Playground, Boston MA
- Gardner Park Leo Drive, Gardner MA
- Gourdin Veteran's Memorial Park, Boston MA
- Peggy Hannon-Rizza Complex- Billerica, MA
- · Camp Edwards Track & Field -Falmouth, MA
- Central High School Turf Fields, Springfield MA
- Brooke Charter School Turf Fields, Mattapan MA
- Boston Public Garden, Boston MA
- Winchendon Community Park, Winchendon MA

3 - OUTREACH & COMMUNICATIONS PLAN

Overview

Our professional staff has extensive experience in conducting public participation, community outreach/engagement, and communication programs. We have successfully used a "community workshop" approach on many projects, through which we have met with residents/neighbors and other interested parties in an informal setting. Many of our projects have required extensive community participation and community-wide involvement by individuals and vested interest groups. With most of our work in the public sector, Weston & Sampson has worked extensively with public groups to gauge public opinion and build consensus within a community.

We understand the need for public outreach and offer extensive experience preparing and presenting legible plans, renderings, photorealistic graphics, estimates, phasing options, 3D models, studies, and other information to public officials, boards, committees, and the public through a community meeting or hearing process. To help further guide the development and execution of a comprehensive public outreach process, we will assist the town in creating a well-crafted, community-driven survey; and a multi-faceted campaign to advertise the project and enlist participation, all while maintaining a consistent and meaningful approach to reach key stakeholder groups.

Our ability to understand our clients' needs and establish positive working relationships invariably yields maximum project benefits.



Figure 1: Northborough Downtown Revitalization Design Presentation.

Collaboration through Communication

Weston & Sampson recognizes that input from town officials and public stakeholders is critical to meet the long-term goals of the community for this phase of the Great Plain Avenue initiative. The project reset, spearheaded by new town officials, echoes the need to engage the community to understand the desired downtown user experience. We will build upon the momentum of new leadership, and learn what has been successful thus far in the redesign journey and where changes can be made to inform the design process for a meaningful project outcome.

The backbone of effective collaboration with the town will be communication. As outlined earlier in this proposal, we anticipate several meetings, both in person and virtual, with town officials to ensure the design adheres to the goals defined by the project team. Our technical expertise will assist the town in making decisions that shape a design solution that folds into the fabric of downtown Needham.



Figure 2: Northborough Downtown Revitalization Information Gathering.

PUBLIC & STAKEHOLDER ENGAGEMENT

Weston & Sampson will plan and conduct public and stakeholder engagement events. We will bring our understanding of how best to engage members of the public and community groups to understand the continually evolving desired downtown user experience.



In addition to the weekly meetings with town officials, we will facilitate public and stakeholder engagement meetings. We will work with town officials to refine the engagement schedule and appropriate venue, but anticipate themes as outlined below.

Initial Listening Session

In all stakeholder activities, we will bring our adaptable engagement philosophy: we make it fun and convenient; we are clear, honest, and authentic; we are mindful and flexible; and we strive to empower the community to contribute meaningfully to project outcomes. In this initial engagement meeting, we will listen to the wants and needs of the community and tailor the proposed design accordingly, when appropriate.

Conceptual Designs Review

Weston & Sampson will prepare two conceptual design alternatives for the Great Plain Avenue corridor that incorporate feedback received from the initial listening session. These design alternatives will be presented in a public forum and will include 3D renderings to visualize what the finished product may look like. We will again seek feedback from the community that we can fold into a preferred design approach.

Preferred Design Alternative

Folding in decisions made in our design team meetings and the conceptual design stakeholder meeting, we will produce a preferred streetscape design for the Great Plain Avenue corridor. This preferred alternative will be presented to the community with several 3D renderings that will bring the new streetscape to life. Feedback received at this final public and stakeholder engagement meeting will help inform the final streetscape design and how that relates to the subsequent phases of the design documentation process.

Additional Outreach & Meetings

Having open lines of communication between town staff, Department of Public Works, and the design team in every phase will benefit this project. The design team project manager is only a phone call or email away.

During the conceptual design phase, we have included nine virtual meetings with town staff, and in the three design documentation phases of the project we have included a total of 11 meetings with

town staff. Additionally, we will present to the town Select Board on two occasions at the 25% and 80% design document submissions.

In-house Graphics Production for Meetings

Within the Weston & Sampson Design Studio, we have the ability to produce quality and photo-realistic 3D renderings. These graphics have played key roles in our team reaching consensus on conceptual designs presented to clients and communities. We have discovered that people attending our meetings where we present ideas through these renderings have a better understanding of the direction in which the overall design is heading. It is easier to facilitate feedback from stakeholders and therefore the process to obtain consensus runs in a more collaborative way.

In Person

- Site walks and hands-on charrettes
- Multi-day workshops
- Consensus-building strategy sessions
- Community meeting presentations

In Print

- Data visualization and storytelling
- Online/mailed/on-site surveys



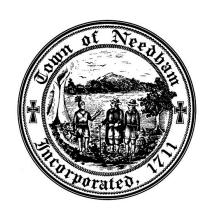
- Project websites and social media
- Virtual engagement
- Automated Response Systems
- Video and local access television



Figure 3: Boston Common Tadpole Playground Community Meeting.

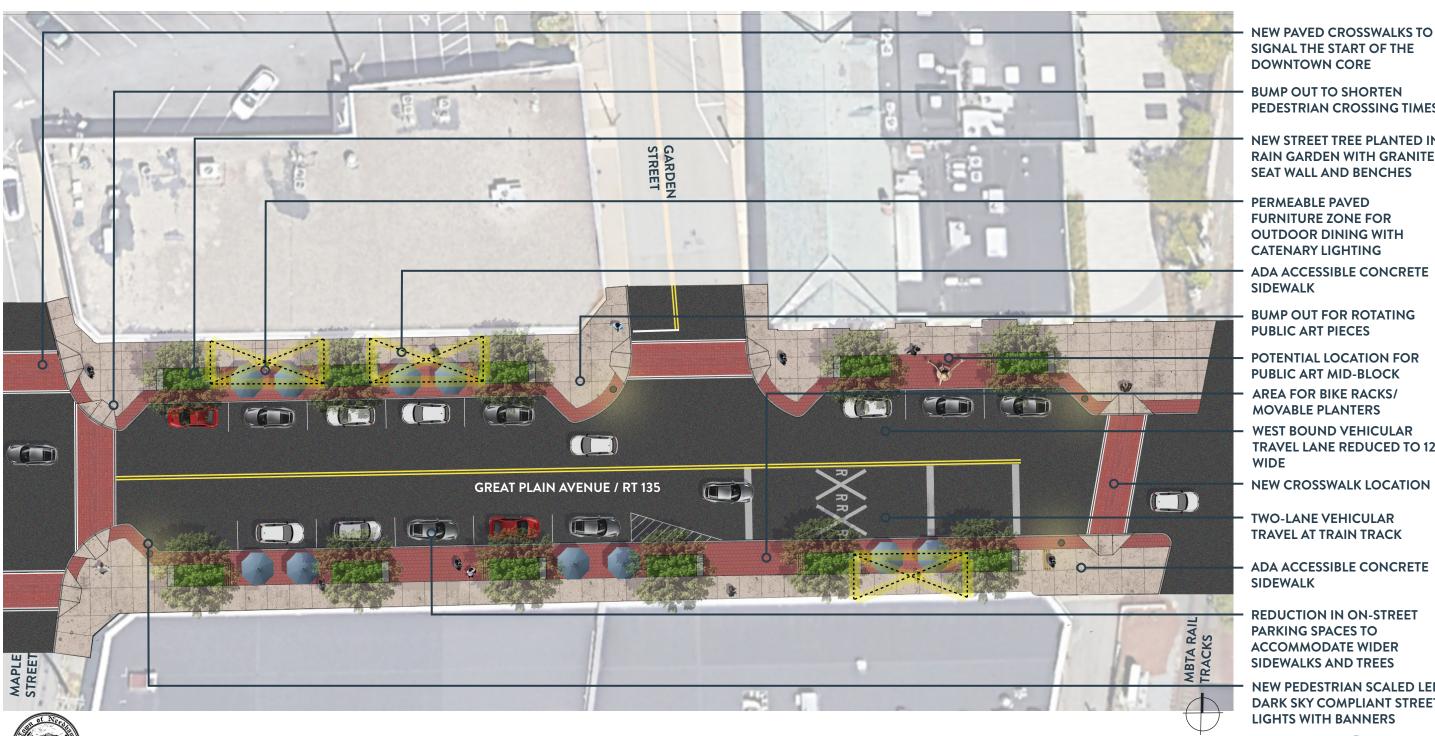


GREAT PLAIN AVENUE, NEEDHAM, MA





CONCEPTUAL PLAN RENDERING: MAPLE STREET TO MBTA TRAIN TRACKS



SIGNAL THE START OF THE **DOWNTOWN CORE**

BUMP OUT TO SHORTEN PEDESTRIAN CROSSING TIMES

NEW STREET TREE PLANTED IN RAIN GARDEN WITH GRANITE SEAT WALL AND BENCHES

PERMEABLE PAVED **FURNITURE ZONE FOR OUTDOOR DINING WITH CATENARY LIGHTING**

ADA ACCESSIBLE CONCRETE **SIDEWALK**

BUMP OUT FOR ROTATING PUBLIC ART PIECES

POTENTIAL LOCATION FOR **PUBLIC ART MID-BLOCK**

AREA FOR BIKE RACKS/ **MOVABLE PLANTERS**

WEST BOUND VEHICULAR TRAVEL LANE REDUCED TO 12'

NEW CROSSWALK LOCATION

TWO-LANE VEHICULAR TRAVEL AT TRAIN TRACK

ADA ACCESSIBLE CONCRETE SIDEWALK

REDUCTION IN ON-STREET PARKING SPACES TO ACCOMMODATE WIDER SIDEWALKS AND TREES

NEW PEDESTRIAN SCALED LED DARK SKY COMPLIANT STREET LIGHTS WITH BANNERS



CONCEPTUAL RENDERING LOOKING EAST FROM MAPLE STREET INTERSECTION





CONCEPTUAL RENDERING LOOKING EAST FROM MID-BLOCK







CONCEPTUAL RENDERING LOOKING WEST FROM MBTA RAIL TRACK





CONCEPTUAL RENDERING LOOKING WEST FROM GARDEN STREET







CONCEPTUAL AERIAL RENDERING LOOKING EAST





CONCEPTUAL AERIAL RENDERING LOOKING EAST







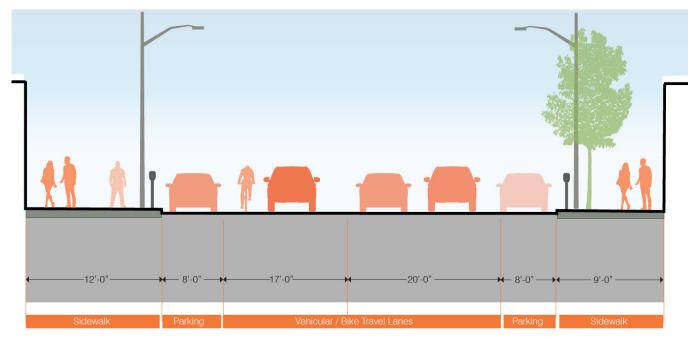
CONCEPTUAL AERIAL RENDERING LOOKING EAST



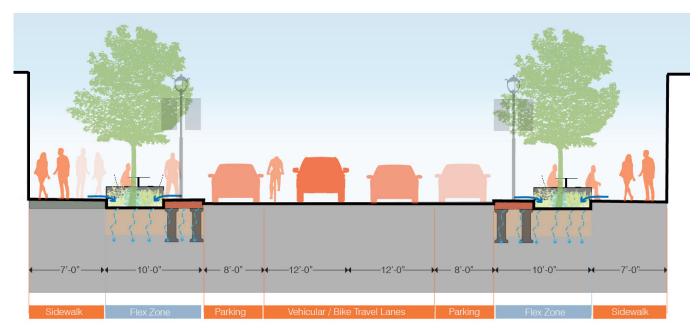




DESIGN STRATEGIES: TYPICAL STREET SECTION AND CONCEPT LAYERING

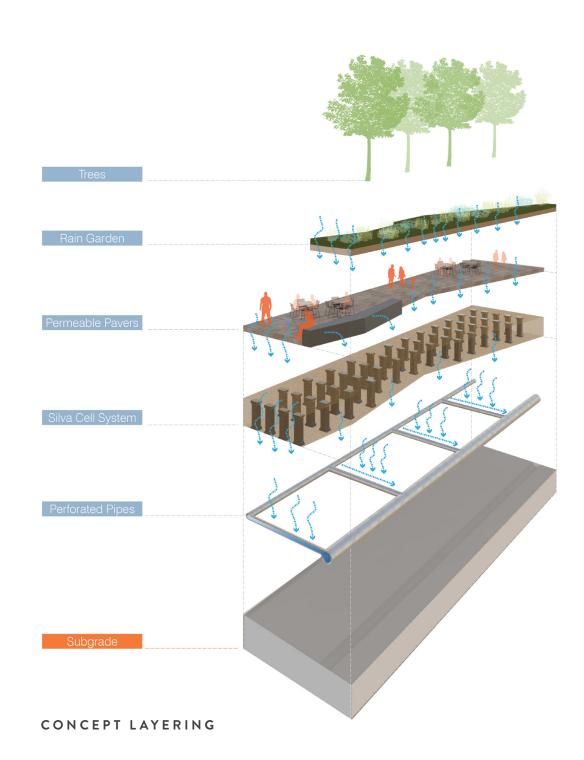


EXISTING GREAT PLAIN AVENUE SECTION



PROPOSED GREAT PLAIN AVENUE SECTION







5 - PROJECT EXAMPLES

Proven Experience

Weston & Sampson has become the preferred planning and landscape architecture consultant for many communities in the Northeast. For all projects, Weston & Sampson's goal is to tailor its approach to meet the needs of both the project and the client. Our clients benefit from the combination of creative and technical planning and design expertise, wealth of inhouse resources, ability to develop and maintain valuable client relationships, and a collaborative project approach.

Our trained staff of designers, landscape architects, architects, engineers, environmental scientists, and construction specialists has provided quality consulting services to a breadth of diverse communities. Municipal clients comprise more than 80 percent of our business. As such, we fully understand the needs and challenges of municipalities, including available technologies, regulatory requirements, cost analysis and funding, and operational issues.

We have completed hundreds of successful park, recreation, and open space planning and design projects for communities throughout the Northeast. We help our clients envision successful futures for their municipal projects.

Weston & Sampson has the experience required to complete the proposed work for The Town of Needham. The project descriptions featured on the following pages highlight our recent, relevant work delivering services like those solicited for Needham's downtown redesign.

Weston & Sampson has built a reputation based upon the successful completion of project goals, attention to detail, and cost-effective, quality work.





Weston & Sampson is working with ownership, local architects and City Agencies to design a new streetscape with a focus on pedestrian accessibility improvements and gathering areas for an office building located in downtown Boston.

Our concept designs used our on-site analysis of how visitors enter and exit the building to help inform the location for new seating and paving. Our paving designs help to navigate people to the main building entrance and visually create a sense of arrival. The addition of the raised granite planters that incorporate seating and planting offers a place for respite. The trees help to provide some human scale adjacent to the building and the low-maintenance perennial and shrub planting provide some color and texture.

We have worked with Boston Disabilities Commission to provide much improved ADA accessibility along the building frontage, including adding a constant 8-foot-wide concrete sidewalk and new accessible curbs ramps at each intersection



client contact

Haril Pandya, FAIA, LEED AP Principal Nelson Worldwide 617-905-4043 HPandya@nelsonww.com













Weston & Sampson designed and implemented multi-modal transportation improvements along Broadway between First and Ames Streets in Kendall Square.

Pedestrian circulation was prioritized using grading-level crossings at driveways, and alignment of the mid-block crosswalk perpendicular to the flow of vehicular travel. Reducing lanes from two to one in each direction removed the "double-jeopardy" pedestrian situation, and allowed for an expanded pedestrian domain.

The entire streetscape within the project area was upgraded. The concrete sidewalks that formerly lined the corridor have given way to grassed lawn areas; brick pads for bench seating areas are located adjacent to brick accent strips lining the curbs.

All sidewalk and pedestrian areas were designed and constructed to exceed the stringent Americans with Disabilities Act (ADA) standards for accessibility. Low maintenance ground cover beds and tree plantings to supplement the existing trees now soften the otherwise hard environment.

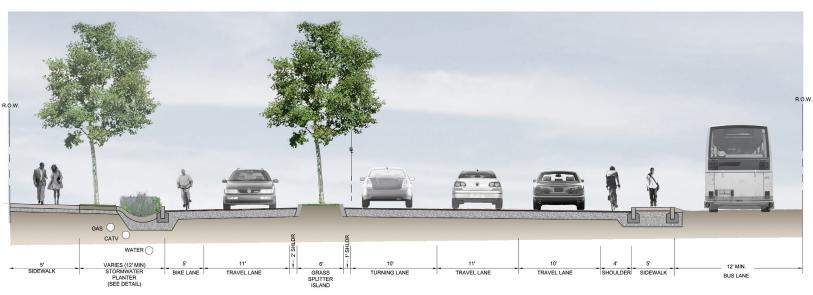


client contact

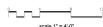
Owen O'Riordan, PE Commissioner Department of Public Works 617-349-4845 ooriordan@CambridgeMA.gov





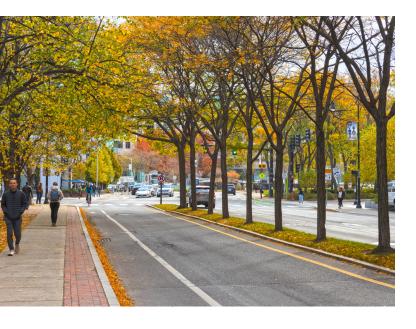


Broadway Typical Section















Weston & Sampson worked with a private developer and architect on a master plan design for a 25-acre waterfront site in Charlestown. This mixed-use development prioritizes addressing existing and future site flooding from predicted sea level rise and climate change by incorporating a resilient flood barrier within a system of new public open spaces. By raising the existing grades along the waterfront, a hierarchy of pedestrian open space is created, offering users a multitude of spatial experiences.

The master plan design includes a variety of new public open spaces that seamlessly connect to the existing neighborhood, and the newly created waterfront park. Sustainability is a key component of the overall design, with a particular focus on stormwater management and reducing urban heat island effects through extensive tree plantings, the creation of green open spaces, and carefully selected materials. This master plan design also incorporates universal accessibility for all users, with a focus on Complete Street principles for multi-modal uses in equal measure.



client contact

Bill Bush Vice President, Real Estate The Flatley Company 617-438-2029 wbush@flatleyco.com







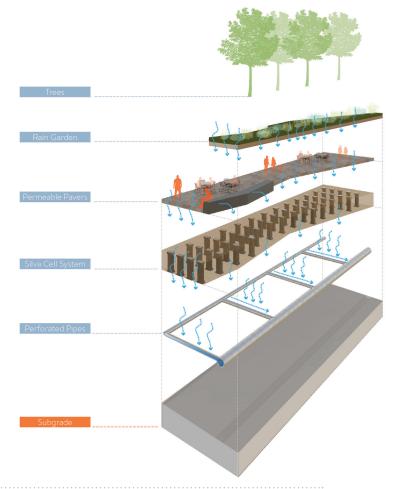
















Weston & Sampson worked with Town of Franklin representatives to prepare a revitalization strategy for Franklin Center. The strategy includes implementation of a series of infrastructure related improvements to create a more exciting, cohesive, and aesthetically pleasing retail and residential setting.

The primary purpose of the planned improvements is to enhance economic development and opportunity and to foster community interaction. The creation of a dynamic and lively town center, at the heart of the Franklin community, will help to restore traditional qualities that were lost as more recent development spread away from the center. In essence, the intent is to create clear signage, safe and convenient parking, new retail and residential development opportunities, and a series of attractive streetscape enhancements.



client contact

Robert Cantoreggi DPW Director Town of Franklin, Massachusetts 508-520-4910 dpw@franklin.ma.us











Weston & Sampson collaborated with the Town of Ludlow to update zoning bylaws, develop town-wide design standards, and create a conceptual master plan for the East Street Revitalization Overlay District, a mile-long commercial and residential corridor in the heart of this Western Massachusetts community. The goals were to enhance East Street's aesthetics, pedestrian facilities, and overall community appeal. The conceptual design-level illustrative site plans determined roadway, intersection, and sidewalk alignments; identified pedestrian accommodations; evaluated utility considerations; and pinpointed opportunities for corridor activation. Inclusion of rain gardens, street tree planting, and other green infrastructure reflects a commitment to sustainable development, contributing to a more resilient and eco-friendly community. The culmination was a set of well-defined, actionable plans. A finalized list of recommended site furnishings, paving, and planting materials for East Street's successful revitalization helped create a more engaging, functional, and sustainable streetscape, improving the overall well-being and appeal of the community as well as the health of Ludlow's commercial sector.



client contact

Marc Strange Town Administrator Town of Ludlow 413-583-5600, Etx 1201 mstrange@ludlow.ma.us









Weston & Sampson is working with town staff, selected stakeholders, and residents to design a master plan for downtown Northborough. We are also providing economic development input through our subconsultant, RKG Associates.

We conducted an initial in-person public meeting at which we received feedback from residents on what should be included within this master plan. The overriding consensus was the need for more housing, retail, and entertainment options in the downtown area.

Four scenario locations in which we incorporated mixed-use buildings with retail on the ground floor and housing above were selected. These new buildings would be connected by a new system of trails and public open spaces for both large and more intimate gatherings.

We will present the selected scenarios to the Town of Northborough at one final public meeting and incorporate them into the final downtown master plan report.



client contact

Laurie Connors Planning Director 508-393-5040 ext. 7 Iconnors@town.northborough.ma.us



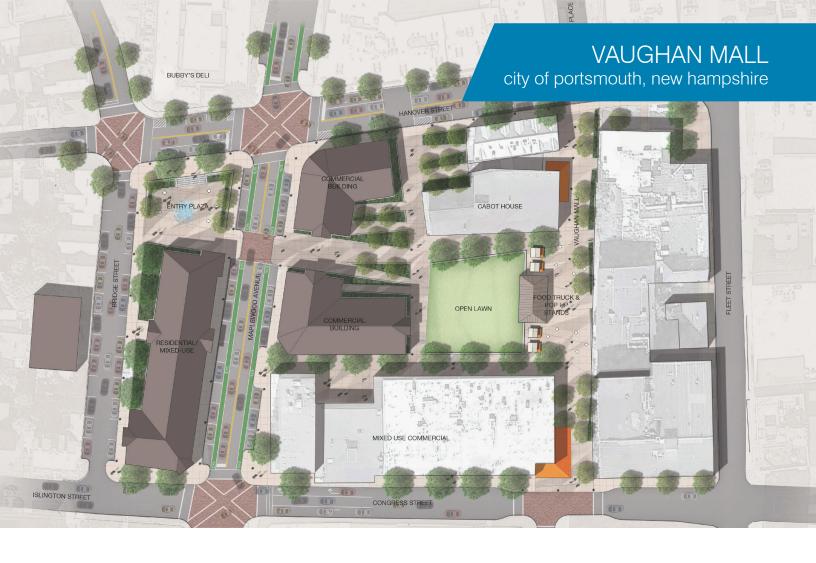












Weston & Sampson assisted the City of Portsmouth in developing a Visioning and Connectivity Action Plan for the important commercial, retail, cultural, and historical corridor surrounding the Vaughan Mall in downtown Portsmouth. The goal of the project was to promote urban vitality and economic development by creating a more pedestrian-friendly environment to increase foot traffic and enhance the pedestrian experience.

The scope of work involved evaluating the existing conditions of the area and creating an inventory of in-process or planned development initiatives. Weston & Sampson reviewed zoning requirements and possible buildout scenarios for city-owned parcels to revitalize the area and repurpose surface parking lots. Our team also identified key priorities from the citywide master plan and looked at ways to implement them in the area. The visioning plan involved illustrative graphics and diagrams to demonstrate how particular improvements or strategies would help achieve a more connected, attractive, and walkable streetscape.



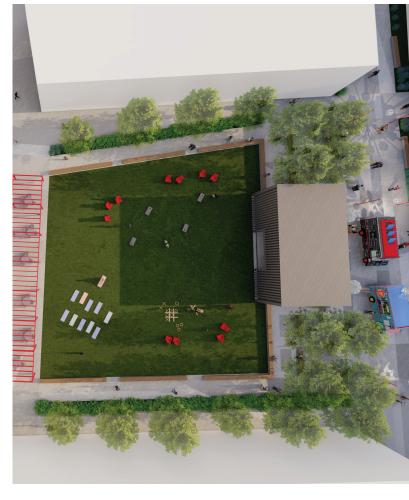
client contact

Joe Almeida Facilities Director City of Portsmouth 603-766-3348 jalmeida@cityofportsmouth.com













Mill Street is an important north-south connector that passes by significant city assets, including Coes Reservoir Beach and Logan Field. Important cross streets within the area include Airport Drive and Park, June, Chandler, and Pleasant Streets.

PROMENADE

The City of Worcester retained Weston & Sampson to develop a Master Plan for improvements to the corridor. Goals of this project included exploring opportunities to improve pedestrian accommodations, ADA compliance, bicycle accommodations, safety, aesthetics, stormwater management systems and new green infrastructure, and providing utility upgrades and structural improvements to the roadway cross-section. Our team of transportation engineers and landscape architects completed an inventory of the existing conditions and observed current traffic movements (vehicles, bicycles, pedestrians).

Utilizing available GIS mapping and other resources, we reviewed existing data such as plans, traffic reports, and studies, etc. We prepared conceptual design drawings to illustrate the implications of reducing excessive pavement width and developing complete street improvements, which include accommodations for all users and enhanced access to the recreation resources and other corridor land uses.

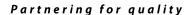
client contact

TRAVFI

PRIVATE

Robert Antonelli, Jr. Assistant Commissioner Department of Public Works 508-799-1190 antonellir@worcesterma.gov







PARKS & PLAYGROUNDS

Name: Boston Parks & Rec-Gourdin Park

Location: Boston MA

Cost estimating for major renovation including pathways, walls, plazas and landscaping.

Client: Martha Lyon Landscape Architecture Contact: Martha Lyon, mhl@marthalyon.com

Estimated Cost: \$1.6M

Name: Mattahunt School Paving & Playground Improvements

Location: Mattapan, MA

Cost estimating improvements to playground and paving.

Client: Warner Larson

Contact: David Warner, dwarner@warnerlarson.com

Estimated Cost: \$3M

Name: **Moakley Park** Location: Boston, MA

Cost estimating for improvements to park including new track & field, soccer field, water play space, basketball

courts, field house, and sport court complex.

Client: Weston & Sampson

Contact: Farah Dakkak, dakkakf@wse.com

Estimated Cost: \$60.1M

Name: Canery Wharf Park Location: Provincetown, MA

Cost estimating for site and restroom improvements

Client: Weston & Sampson

Contact: Cheri Ruane, ruanec@wseinc.com

Estimated Cost: \$3M

Flaherty Park Playground Location: Boston, MA

Cost estimating for improvements to park and playground including addition of a dog park.

Client: Terraink

Contact: Kellie Connelly, kconnelly@terraink.com

Estimated Cost: \$3M

Appendix A



Town of Needham

Downtown Redesign – Great Plain Avenue Corridor - Solicitation for Detailed Proposals 24DPW189M

Certificate of Authority

Complete Only If Applicable

1.	I hereby o	certify that I am the Clerk/Secretary	of						
	·	(inser	t full name of Corporation)						
2.	corporatio	on, and that	cer who signed the contract and bonds.)						
		(insert the name of offi	cer who signed the contract and bonds.)						
3.	is the duly	y elected (insert the title of t							
		(insert the title of t	ne officer in line 2)						
4.	of said co	rporation, and that on							
	(insert a date that is ON OR BEFORE the date the officer signed the contract and bonds.)								
		at a duly authorized meeting of the Board of Directors of said corporation, at which all the directors were present or waived notice, it was voted that							
5.	(insert name from line 2) the (insert title from line 3)								
	(insert	t name from line 2)	(insert title from line 3)						
	name execut with o and th	and on behalf of said corporation, ar tion of any contract of obligation in r without the Corporate Seal, shall	rized to execute contracts and bonds in the ad affix its Corporate Seal thereto, and such this corporation's name and on its behalf, be valid and binding upon this corporation; ended or rescinded and remains in full force						
6.	ATTEST: _		AFFIX CORPORATE						
		(Signature of Clerk or Secretary)*	SEAL HERE						
7.	Name:								
		(Please print or type name in line 6)*						
8.	Date:								
		(insert a date that is ON OR AFTE officer signed the contract and bo							

The name and signature inserted in lines 6 & 7 must be that of the Clerk or Secretary of the corporation.

PLEASE REFERENCE ATTACHED CERTIFICATE OF VOTE.



55 Walkers Brook Drive, Suite 100, Reading, MA 01867

Clerk's Certificate of Vote

The undersigned, Clerk of Weston & Sampson Engineers, Inc., hereby certifies that at a meeting duly called in accordance with the by-laws, the Board of Directors unanimously passed the following resolution on December 14, 2023.

VOTED: To authorize

Jeffrey J. Alberti Francis M. Ricciardi

acting individually, to execute and deliver on behalf of the Corporation, contracts for Professional Services which are in the ordinary course of the Corporation's business, not including contracts exceeding \$5,000,000, during the fiscal year 2024.

VOTED: To authorize

S. Roger Alcott	Robert A. Goober	George D. Naslas	Cheri F. Ruane
Prasanta K. Bhunia	Robert L. Horner	Kent M. Nichols	Michael J. Scipione
Pompeo Casale	Hillary M. Lacirignola	Frank E. Occhipinti	Leah E. Stanton
David M. Elmer	Colleen A. Manning	Christopher M. Perkins	John M. Sykora
John A. Figurelli	Blake A. Martin	Kim A. Plourde	Daniel G. Tenney III
Donald G. Gallucci	Margaret A. McCarthy	Eric T. Reitter	Patrick A. Terrien
Kipling R. Gearhart	Tara E. McManus	Michael J. Richard	Anthony Zerilli

acting individually, to execute and deliver on behalf of the Corporation, contracts for Professional Services which are in the ordinary course of the Corporation's business, not including contracts exceeding \$3,000,000, during the fiscal year 2024.

VOTED: To authorize

Daniel P. Biggs	Rob F. Good, Jr.	Jeffrey W. McClure	Daniel E. Sheahan
Scott R. Bruso	Paul R. Greco	Brian J. McCormack	Robert G. Tedeschi
Robert J. Bukowski	Michael D. Kastanotis	Meghan E. Moody	Laurie R. Toscano
Patrick M. Cotton	Kara D. Keleher	Nathan E. Michael	Paul V. Uzgiris
Raed M. EL-Farhan	Peter J. Kolokithas	Steven K. Pedersen	Raju Vasamsetti
Tulin H. Fuselier	Brandon M. Kunkel	Jaurice A. Schwartz	Stephen P. Wiehe
Frank Getchell	Kevin A. MacKinnon	Steven D. Shaw	Joseph M. Zongol

acting individually, to execute and deliver on behalf of the Corporation, contracts for Professional Services which are in the ordinary course of the Corporation's business, not including contracts exceeding \$500,000, during the fiscal year 2024.

VOTED: To authorize

Todd Bridgeo	Johanna D. Hall	Jeffrey C. Provost	Michael A. Smith
Timothy P. Corrigan	Kevin S. Hutchens	Corey Repucci	Carl W. Stone
Sarah R. DeStefano	Christopher S. Kennedy	Robin Seidel	Michael Warner
Indrani Ghosh	Paul A. McKinlay	Nathan Seifert	

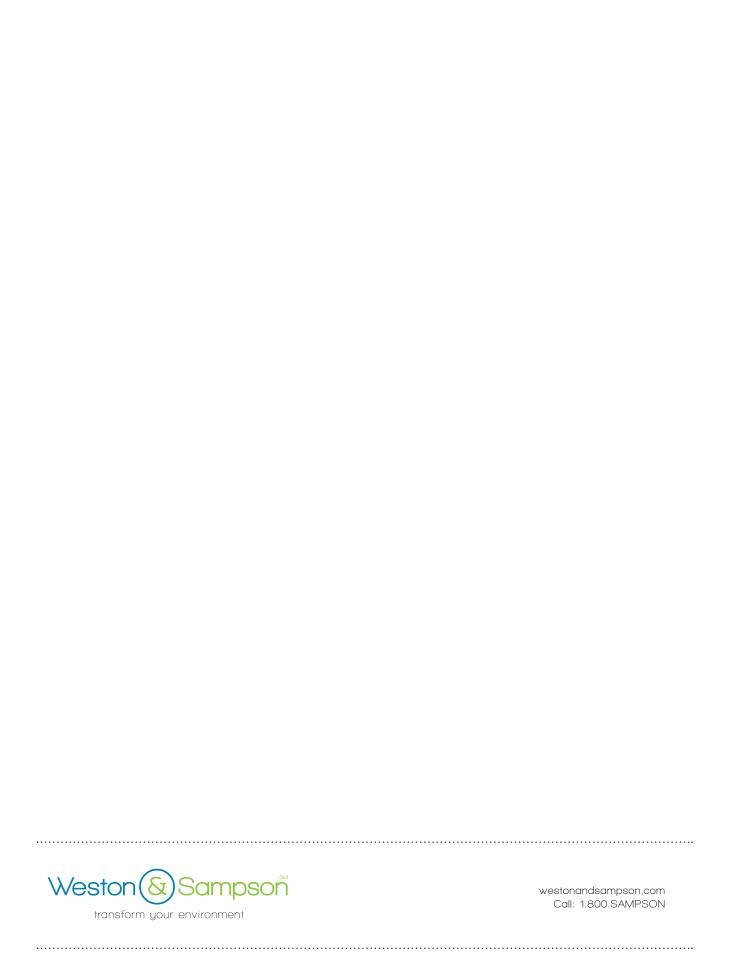
acting individually, to execute and deliver on behalf of the Corporation, contracts for Professional Services which are in the ordinary course of the Corporation's business, not including contracts exceeding \$100,000 during the fiscal year 2024.

The undersigned further certifies that the above vote has not been amended or rescinded and remains in full force and effect as of the date set forth below.



Christopher M. Perkins, PE, Clerk

Date





Select Board TOWN OF NEEDHAM AGENDA FACT SHEET

MEETING DATE: 2/27/2024

Agenda Item	Climate Action Committee Composition & Charge
Presenter(s)	Kate Fitzpatrick, Town Manager

1. BRIEF DESCRIPTION OF TOPIC TO BE DISCUSSED

The Town Manager will recommend that the Board create a composition and charge for a Climate Action Committee to follow the work of the Climate Action Plan Committee. The new standing committee will advise the Town and the Select Board on the implementation of policies and practices to achieve the objectives of the Climate Action Roadmap.

2. VOTE REQUIRED BY SELECT BOARD

N/A - Discussion Only

3. BACK UP INFORMATION ATTACHED

a. Draft Composition & Charge, Climate Action Committee

Town of Needham Climate Action Committee Committee Charge and Composition

Type:	Ad Hoc
Legal Reference:	Select Board Vote
Appointing Authority:	Select Board
Number of Voting Members:	Nine
Term of Appointment	Three Years (first appointments will be staggered)
Special Municipal Employee	Yes
Staff Support	Sustainability Manager

Members	Year Appointed	Term Expiration	Туре

Composition: Nine voting members (Climate Action Roadmap area leads noted for applicable members):

- Member of the Select Board or Designee Governance, Clean Energy Supply
- Member of the Planning Board or Designee Climate Smart Zoning and Planning
- Member of the Conservation Commission or Designee Natural Resources
- Member of the Mobility Planning and Coordination Committee or designee Zero Emissions Transportation
- Member of the Permanent Public Building Committee or Designee Net Zero Building

- Member of the Finance Committee or Designee
- Member of the School Committee or Designee
- Resident At Large
- Resident At Large
- Youth Member (Non-Voting)

Purpose: The purpose of the Climate Action Committee is to advise and assist the Town of Needham, through the Select Board, in the implementation of policies and practices to achieve the objectives of the Town's Climate Action Roadmap and to support the state's attainment of our 2050 Net Zero goals.

Charge: The Climate Action Committee will:

- Provide input and adopt revisions to the Climate Action Roadmap at least once every five years to reflect new priorities, objectives, and initiatives.
- Review Needham's climate-related data to report annual progress relative to climate action goals as defined in the Climate Action Roadmap.
- On a community-wide basis to include residential, commercial, industrial, and municipal entities identify and prioritize:
 - o achievable short-term and long-term projects and initiatives that encourage net zero energy and sustainable practices;
 - o present and future climate vulnerabilities; and
 - o adaptation strategies to help Needham become more climate resilient.
- Recommend to the Select Board priorities for inclusion into the annual operating budget and five-year capital plan.
- Conduct other studies and analyses as requested by the Select Board relative to the Committee's purpose.

Charge Adopted: March 12, 2024 Charge Revised:

SME Status Voted: March 12, 2024



Select Board TOWN OF NEEDHAM AGENDA FACT SHEET

MEETING DATE: 2/27/2024

Agenda Item	2024 Annual Town Meeting Update		
Presenter(s)	Kate Fitzpatrick, Town Manager		

1. BRIEF DESCRIPTION OF TOPIC TO BE DISCUSSED

The Town Manager will discuss proposed updates to the draft warrant for the 2024 Annual Town Meeting.

2. VOTE REQUIRED BY SELECT BOARD

Suggested Motion: That the Board vote to approve updates to the warrant for the 2024 Annual Town Meeting.

3. BACK UP INFORMATION ATTACHED

a. 2024 Annual Town Meeting Warrant Draft, February 22, 2024

TOWN OF NEEDHAM



2024 ANNUAL TOWN MEETING WARRANT

ELECTION: TUESDAY, APRIL 9, 2024

BUSINESS MEETING: MONDAY, MAY 6, 2024 7:30 P.M.

JAMES HUGH POWERS HALL
NEEDHAM TOWN HALL
1471 HIGHLAND AVENUE



WARRANT FOR THE ANNUAL TOWN MEETING TUESDAY, APRIL 9, 2024 TOWN OF NEEDHAM COMMONWEALTH OF MASSACHUSETTS

Norfolk, ss.

To either of the Constables in the Town of Needham in said County, Greetings:

In the name of the Commonwealth of Massachusetts you are hereby required to notify and warn the Inhabitants of the Town of Needham qualified to vote in elections and in Town Affairs to meet in their respective voting places in said Town namely:

Precinct A - Center at the Heights, 300 Hillside Ave.

Precinct B - Center at the Heights, 300 Hillside Ave.

Precinct C - Newman School, 1155 Central Ave. Gym

Precinct D - Newman School, 1155 Central Ave. Gym

Precinct E - Needham Golf Club, 49 Green Street

Precinct F - Rosemary Recreation Complex, 178 Rosemary St.
Precinct G - Rosemary Recreation Complex, 178 Rosemary St.

Precinct H - Needham Golf Club, 49 Green Street

Precinct I - Town Hall, 1471 Highland Ave., Powers Hall Precinct J - Town Hall, 1471 Highland Ave., Powers Hall

on TUESDAY, THE NINTH DAY OF APRIL 2024

from seven o'clock in the forenoon, until 8:00 o'clock in the afternoon, then and there to act upon the following articles, viz:

ARTICLE 1: ANNUAL TOWN ELECTION

To choose by ballot the following Town Officers:

Two Members of the Select Board for Three Years;

One Assessor for Three Years:

One Town Clerk for One Year;

Two Members of School Committee for Three Years:

One Trustee of Memorial Park (trustee of soldiers' memorials – veteran) for Three Years;

One Trustee of Memorial Park (trustee of soldiers' memorials – non-veteran) for Three Years;

Two Trustees of Needham Public Library for Three Years;

Two Members of Board of Health for Three Years:

One Member of Planning Board for Five Years;

One Member of Needham Housing Authority for Five Years;

One Commissioner of Trust Funds for Three Years;

Two Members of Park and Recreation Commission for Three Years.

Eight Town Meeting Members from Precinct A for Three Years;

Eight Town Meeting Members from Precinct B for Three Years;

One Town Meeting Member from Precinct B for One Year;

Eight Town Meeting Members from Precinct C for Three Years;

Eight Town Meeting Members from Precinct D for Three Years;

Eight Town Meeting Members from Precinct E for Three Years; Eight Town Meeting Members from Precinct F for Three Years; Eight Town Meeting Members from Precinct G for Three Years; Eight Town Meeting Members from Precinct I for Three Years; Eight Town Meeting Members from Precinct I for Three Years; Eight Town Meeting Members from Precinct J for Three Years.

and you are also required to notify the qualified Town Meeting Members of the Town of Needham to meet in Powers Hall on Monday May 6, 2024 at 7:30 o'clock in the afternoon, then and there to act upon the following articles:

Warrant for the Annual Town Meeting Monday, May 6, 2024 at 7:30 p.m. at Needham Town Hall

ARTICLE 2: COMMITTEE AND OFFICER REPORTS

To hear and act on the reports of Town Officers and Committees.

HUMAN RESOURCES ARTICLES

ARTICLE 3: ESTABLISH ELECTED OFFICIALS' SALARIES

To see if the Town will vote to fix the compensation of the following elected officers of the Town as of July 1, 2024, as required by Massachusetts General Laws, Chapter 41, Section 108:

Town Clerk	\$
Select Board, Chair	\$1,800
Select Board, Others	\$1,500

INSERTED BY: Personnel Board

FINANCE COMMITTEE RECOMMENDS THAT: PERSONNEL BOARD RECOMMENDS THAT:

<u>Article Information:</u> In accordance with Massachusetts General Law Chapter 41, Section 108, the Town must annually vote to set the salary and compensation for any elected Town officials who receive compensation. The annual stipends for the members of the Select Board have remained unchanged since 1977.

ARTICLE 4: FUND COLLECTIVE BARGAINING AGREEMENT – NIPEA

To see if the Town will vote to fund the cost of items contained in a collective bargaining agreement between the Town and the Needham Independent Public Employees Association by authorizing the Town Manager to transfer a sum necessary to fund the cost items contained in the agreement for fiscal year 2025; or take any other action relative thereto.

INSERTED BY: Select Board

FINANCE COMMITTEE RECOMMENDS THAT: PERSONNEL BOARD RECOMMENDS THAT:

Article Information:

ARTICLE 5: FUND COLLECTIVE BARGAINING AGREEMENT – ITWA

To see if the Town will vote to fund the cost of items contained in a collective bargaining agreement between the Town and the Needham Independent Town Workers Association by authorizing the Town Manager to transfer a sum necessary to fund the cost items contained in the agreement for fiscal year 2025; or take any other action relative thereto.

INSERTED BY: Select Board

FINANCE COMMITTEE RECOMMENDS THAT: PERSONNEL BOARD RECOMMENDS THAT:

Article Information:

FINANCE ARTICLES

ARTICLE 6: APPROPRIATE FOR NEEDHAM PROPERTY TAX ASSISTANCE PROGRAM

To see if the Town will vote to raise and/or transfer and appropriate the sum of \$50,000 for the purpose of funding the Needham Property Tax Assistance Program, to be spent under the direction of the Town Manager, and to meet this appropriation that said sum be transferred from Overlay Surplus; or take any other action relative thereto.

INSERTED BY: Select Board

FINANCE COMMITTEE RECOMMENDS THAT: Article be Adopted

Article Information: The Property Tax Assistance Program helps elderly and disabled taxpayers in need. This appropriation complements donations by private parties to the "Voluntary Tax Relief Program" authorized by statute. The goal of the Select Board is to set a target annual appropriation for the Property Tax Assistance Program at least equal to the amount of private contributions to the voluntary program during the preceding fiscal year. The voluntary fund received \$12,561 in FY2023.

ARTICLE 7 APPROPRIATE FOR FACILITIES MAINTENANCE PROGRAM

To see if the Town will vote to raise and/or transfer and appropriate the sum of \$1,000,000 for the purpose of funding the Public Facilities Maintenance Program, said sum to be spent under the direction of the Town Manager, and to meet this appropriation that said sum be transferred from Overlay Surplus; or take any other action relative thereto.

INSERTED BY: Select Board

FINANCE COMMITTEE RECOMMENDS THAT:

<u>Article Information</u>: This recurring warrant article funds the annual maintenance of public buildings throughout the Town and School Department, including, but not limited to, asbestos abatement, duct cleaning, painting, electrical and mechanical systems, HVAC, lighting, flooring, carpentry work, and other repairs and upgrades.

ARTICLE 8: APPROPRIATE FOR SMALL REPAIR GRANT PROGRAM

To see if the Town will vote to raise and/or transfer and appropriate the sum of \$50,000 for the purpose of funding the Small Repair Grant Program, said sum to be spent under the direction of the Town Manager, and to meet this appropriation that said sum be transferred from Overlay Surplus; or take any other action relative thereto.

INSERTED BY: Affordable Housing Trust

FINANCE COMMITTEE RECOMMENDS THAT: Article be Adopted

Article Information: The Small Repair Grant Program provides financial assistance to low- and moderate-income Needham residents to make repairs and alterations to their homes for health and safety reasons. Up to \$5,000 in grant funding is available per participant, and applications will be evaluated and prioritized based on the extent of the health and safety problems and the financial need of the applicants. Eligible applicants must be 60 years or older, or have a disability, with incomes at or below 80% of area median income. Eligible work items include minor plumbing or electrical work, light carpentry, doorbell switches, window or door repairs or replacements, railing repairs, broken or clogged gutters or downspouts, step or porch improvements, work on locks, smoke/CO detectors, weather stripping, bathroom grab bars, raised toilets, and hand-held shower heads, among others.

ARTICLE 9: APPROPRIATE FOR PLANNING CONSULTING ASSISTANCE

To see if the Town will vote to raise and/or transfer and appropriate the sum of \$80,000 for the purpose of funding professional consulting services for the Planning and Community Development Department, said sum to be spent under the direction of the Town Manager, and to meet this appropriation that said sum be transferred from Overlay Surplus; or take any other action relative thereto.

INSERTED BY: Select Board

FINANCE COMMITTEE RECOMMENDS THAT:

Article Information: These funds would provide support to the Planning and Community Development Department, enabling the Director to engage professional services from time to time to support regulatory functions of the Planning and Community Development Department, which oversees permit granting for the Planning Board, the Zoning Board of Appeals, and the Conservation Commission; and land use and Town planning initiatives of the Planning Department.

ARTICLE 10: APPROPRIATE FOR SCIENTIFIC EXPERTS & CONSULTANTS

To see if the Town will vote to raise and/or transfer and appropriate the sum of \$50,000 for the purpose of funding professional consulting services and scientific experts for the Health and Human Services Department, said sum to be spent under the direction of the Town Manager, and to meet this appropriation that said sum be raised from the Tax Levy; or take any other action relative thereto.

INSERTED BY: Select Board

FINANCE COMMITTEE RECOMMENDS THAT:

<u>Article Information</u>: These funds would establish a source of funding that allows the Board of Health to retain outside scientific experts and consultants to evaluate novel and emerging health issues about which the Board and the Public Health Division lack the necessary expertise.

ARTICLE 11: APPROPRIATE FOR FIRE ALARM WIRE REMOVAL

To see if the Town will vote to raise and/or transfer and appropriate the sum of \$201,885 for the purpose of funding the removal of townwide fire alarm wiring, said sum to be spent under the direction of the Town Manager, and to meet this appropriation that \$99,145 be transferred from Free Cash and that \$102,740 be transferred from Article 37 of the 2014 Annual Town Meeting; or take any other action relative thereto.

INSERTED BY: Select Board

FINANCE COMMITTEE RECOMMENDS THAT:

<u>Article Information</u>: These funds would allow for the removal of all fire alarm wiring on circuits throughout Town. The wiring is no longer in use and must be removed whenever a pole is relocated or replaced.

ARTICLE 12: APPROPRIATE FOR INFORMATION TECHNOLOGY CONSOLIDATION

To see if the Town will vote to accept the provisions of Massachusetts General Laws Chapter 71, Section 37M, to consolidate information technology services of the School Committee and the Town under the direction of the School Committee, and to raise and/or transfer and appropriate the sum of \$934,055 to support information technology consolidation, to be spent under the direction of the School Committee, and to meet this appropriation that \$248,000 be raised from the Tax Levy and \$686,055 be transferred from Free Cash; or take any other action relative thereto.

INSERTED BY: Select Board and School Committee FINANCE COMMITTEE RECOMMENDS THAT:

Article Information:

ARTICLE 13: APPROPRIATE THE FY2025 OPERATING BUDGET

To see what sums of money the Town will vote to raise, appropriate, and/or transfer for the necessary Town expenses and charges, and further that the operating budget be partially funded by a transfer from Free Cash in the amount of \$X, from Overlay Surplus in the amount of \$X, from amounts Reserved for Debt Exclusion Offsets in the amount of \$X, and \$X to be raised from CPA receipts; and further that the Town Manager is authorized to make transfers from line item #9 to the appropriate line items in order to fund the classification and compensation plan approved in accordance with the provisions of Section 20B(5) of the Town Charter, and to fund collective bargaining agreements approved by vote of Town Meeting; and further that the Town Manager is authorized to expend from line item 5 in order to meet expenses for post-employment health and life insurance benefits for eligible retirees from the fund established for that purpose; or take any other action relative thereto.

INSERTED BY: Finance Committee

FINANCE COMMITTEE RECOMMENDS THAT:

ARTICLE 14: APPROPRIATE THE FY2025 SEWER ENTERPRISE FUND BUDGET

To see if the Town will vote to raise and/or transfer and appropriate the following sums of money to operate the Sewer Division of the Department of Public Works during fiscal year 2025, under the provisions of M.G.L. Chapter 44, Section 53F ½:

Sewer Enterprise FY2025

F 12025										
Line # Description		FY2023		FY2024		FY2025				
		Expended	FTE	Current Budget	FTE	Recommended	FTE	Town Meeting Amendments		
201A	Salary & Wages	\$1,003,177	11.0	\$1,144,544	11.0	\$1,194,443	11.0			
201B	Expenses	\$580,617		\$823,367		\$866,539				
201C	Capital Outlay	\$49,950		\$65,000		\$96,000				
201D	MWRA Assessment	\$6,760,857		\$7,084,841		\$7,084,841				
201E	Debt Service	\$606,350		\$610,000		\$670,000				
202	Reserve Fund	Transfers Only		\$35,000		\$35,000				
	TOTAL	\$9,000,951	11.0	\$9,762,752	11.0	\$9,946,823	11.0			
	FY2025 Budget Percentage Change from FY2024 Budget 1.9%									

and to meet this appropriation that \$8,351,268 be raised from Sewer Enterprise Fund receipts, \$745,804 be transferred from Sewer Enterprise Fund Retained Earnings, and \$849,751 be raised from the Tax Levy and transferred to the Sewer Enterprise Fund; or take any other action relative thereto.

INSERTED BY: Select Board & Finance Committee FINANCE COMMITTEE RECOMMENDS THAT:

Article Information:

Budget Line	FY2025 Sewer	FY2025 Drains	FY2025	FY2024 Sewer	FY2024 Drains	FY2024 Sewer Budget
Budget Line	Operations	Program	Recommended Budget	Operations	Program	1 1 2024 Sewel Budget
Salary & Wages	\$750,267	\$444,176	\$1,194,443	\$718,174	\$426,370	\$1,144,544
Expenses	\$460,964	\$405,575	\$866,539	\$439,379	\$383,988	\$823,367
Capital Outlay	\$96,000		\$96,000	\$65,000		\$65,000
MWRA Assessment	\$7,084,841		\$7,084,841	\$7,084,841		\$7,084,841
Debt Service	\$670,000		\$670,000	\$610,000		\$610,000
Reserve Fund	\$35,000		\$35,000	\$35,000		\$35,000
Total	\$9,097,072	\$849,751	\$9,946,823	\$8,952,394	\$810,358	\$9,762,752
	FY2025 Sewer	FY2025 Drains	FY2025 Sewer	FY2025 Sewer	FY2025 Drains	FY2025 Sewer
	Operations \$ Change	Operations \$ Change	Enterprise \$ Change	Operations % Change	Operations % Change	Enterprise % Change
Salary & Wages	\$32,093	\$17,806	\$49,899	4.5%	4.2%	4.4%
Expenses	\$21,585	\$21,587	\$43,172	4.9%	5.6%	5.2%
Capital Outlay	\$31,000		\$31,000	47.7%		47.7%
MWRA Assessment						
Debt Service	\$60,000		\$60,000	9.8%		9.8%
Reserve Fund						
Total	\$144,678	\$39,393	\$184,071	1.6%	4.9%	1.9%

ARTICLE 15: APPROPRIATE THE FY2025 WATER ENTERPRISE FUND BUDGET

To see if the Town will vote to raise and/or transfer and appropriate the following sums of money to operate the Water Division of the Department of Public Works during fiscal year 2025, under the provisions of M.G.L. Chapter 44, Section 53F ½:

Water Enterprise FY2025

Line #	Description	FY2023	FY2024	FY2025					
		Expended FTE	Current Budget FTE	Recommended FTE	Town Meeting Amendments				
301A	Salary & Wages	\$1,141,589 17.0	\$1,598,687 17.0	\$1,632,768 17.0					
301B	Expenses	\$1,355,152	\$1,564,469	\$1,689,997					
301C	Capital Outlay	\$0	\$53,605	\$57,100					
301D	MWRA Assessment	\$1,464,186	\$1,887,130	\$1,887,130					
301E	Debt Service	\$1,244,475	\$1,250,000	\$1,460,000					
302	Reserve Fund	Transfers Onlt	\$75,000	\$75,000					
	TOTAL	\$5,205,401 17.0	\$6,428,891 17.0	\$6,801,995 17.0					

and to meet this appropriation that \$6,075,000 be raised from Water Enterprise Fund receipts, and that \$726,995 be transferred from Water Enterprise Fund Retained Earnings; or take any other action relative thereto.

INSERTED BY: Select Board & Finance Committee FINANCE COMMITTEE RECOMMENDS THAT:

Article Information:

ARTICLE 16: SET THE ANNUAL DEPARTMENT REVOLVING FUND SPENDING LIMITS

To see if the Town will vote to fix the maximum amount that may be spent during fiscal year 2025 beginning on July 1, 2024 for the revolving funds established in the Town's General By-Laws for certain departments, boards, committees, agencies, or officers in accordance with Massachusetts General Law Chapter 44, Section 53E½, or take any other action relative thereto.

Revolving Fund	Department, Board, Committee, Agency, or Officer	FY2024 Spending Limit	FY2025 Spending Limit
Public Facility Use	Public Works Department	\$250,000	\$250,000
Tree Replacement	Public Works Department	\$25,000	\$25,000
School Transportation	School Committee	\$819,000	\$819,000
Home Composting	Public Works Department	\$3,000	\$3,000
Water Conservation	Public Works Department \$10,000		\$10,000
Immunization Program	Health and Human Services Department	\$125,000	\$125,000
Traveling Meals	Health and Human Services Department	\$100,000	\$100,000
Needham Transportation Program	Health and Human Services Department	\$10,000	\$10,000
Aging Services Programs	Health and Human Services Department	\$75,000	\$75,000
Youth Services Programs	Health and Human Services Department	\$5,000	\$5,000
Memorial Park Activities	Memorial Park Trustees	\$4,100	\$4,100

INSERTED BY: Select Board

FINANCE COMMITTEE RECOMMENDS THAT: Article be Adopted

Article Information: The purpose of this article is to set the annual spending limit for the various revolving funds that are established by Town By-Law in accordance with M.G.L Chapter 44 Section 53E1/2. The law requires that the Town Meeting shall, on or before July 1 of each fiscal year, vote on the limit for each revolving fund established under this law the total amount that may be expended during the fiscal year. The law provides also that the limit on the amount that may be spent from a revolving fund may be increased with the approval of the Select Board and Finance Committee should the revolving activity exceed the spending limit, but only until the next Annual Town Meeting. There are no proposed changes to current annual spending limits.

ARTICLE 17: AUTHORIZATION TO EXPEND STATE FUNDS FOR PUBLIC WAYS

To see if the Town will vote to authorize the Town Manager to permanently construct, reconstruct, resurface, alter, or make specific repairs upon all or portions of various Town ways and authorize the expenditure of funds received, provided, or to be provided by the Commonwealth of Massachusetts through the Massachusetts Department of Transportation; or take any other action relative thereto.

INSERTED BY: Select Board

FINANCE COMMITTEE RECOMMENDS THAT:

Article Information: The Town receives funding from the Commonwealth of Massachusetts for road construction projects. Approval of Town Meeting is required for the Town to receive and expend the funds. The Massachusetts Department of Transportation (MassDOT) will distribute Chapter 90 funding only after it has been authorized by the Legislature and the Governor. The preliminary Chapter 90 allocation for FY2025 is \$X. Unless circumstances require otherwise, this Chapter 90 allocation will be directed towards additional infrastructure projects, such as intersection improvements, roadway reconstruction of Marked Tree Road, sidewalk improvements, and the design and construction of the downtown infrastructure improvement project.

ZONING/LAND USE ARTICLES

ARTICLE 18: AMEND ZONING BY-LAW – AFFORDABLE HOUSING DISTRICT

To see if the Town will vote to amend the Zoning By-Law as follows:

- 1. In Section 2.1, <u>Classes of Districts</u>, by adding the following term and abbreviation under the subsection Residential:
 - "AHD Affordable Housing District"
- 2. In Section 3, <u>Use Regulations</u>, by inserting a new Subsection 3.16, <u>Affordable Housing District</u>, to read as follows:
 - "3.16 <u>Affordable Housing District</u>
 - 3.16.1 Purpose of District

The purpose of the Affordable Housing District (hereinafter referred to as AHD) is to promote the health, safety, and general welfare of the community by encouraging the establishment of affordable housing units, while minimizing potential adverse impacts upon nearby residential and other properties.

3.16.2 <u>Scope of Authority</u>

The regulations of the Affordable Housing District shall govern all new construction, reconstruction, or expansion of new or existing buildings, and new or expanded uses. Provisions of Section 3.16 shall supersede those of Section 3.2 (Schedule of Use Regulations), Section 4.1.5 (Minimum Required Lot Width), Sections 4.2 through 4.11 (Dimensional Regulations) and Section 5.1.2 (Required Parking), except as otherwise specifically provided herein. The Planning Board shall be the permitting authority for any multi-family housing development in the AHD.

3.16.3 Definitions

For the purposes of this section and the Needham Zoning By-Law, the following words and phrases shall have the following meanings:

- a. AHD Project a multi-family housing development of affordable housing units, as defined in Section 1.3 of this By-Law.
- b. Multi-family housing- a building with 3 or more residential dwelling units or 2 or more buildings on the same lot with more than 1 residential dwelling unit in each building.
- c. Site Plan Review the Site Plan Review process as provided in Section 7.4 that an applicant must obtain for any AHD project.

3.16.4 Allowed Uses

The following uses may be constructed, maintained, and operated by right:

- a. AHD Projects, after completion of Site Plan Review as provided in Section 7.4.
- b. Accessory buildings and uses to the use allowed by right.

3.16.5 <u>Multiple Buildings in the Affordable Housing District</u>

More than one building may be located on a lot in the AHD as a matter of right, provided that each building and its uses complies with the requirements of Section 3.16 of this By-Law.

3.16.6 Dimensional Regulations for AHD Projects in the Affordable Housing District

- a. Minimum Lot Area (Sq. Ft.): 20,000 SF
- b. Minimum Lot Frontage (Ft.): 150 FT
- c. Minimum Front Setback¹ (Ft.): 40 FT

¹ The front setback shall be a landscaped, vegetative buffer area, except that driveway openings, sidewalks, walkways and screened mechanical equipment may be located in the buffer area. Additionally, parking areas may be located in

d. Minimum Side Setback² (Ft.): 25 FT

e. Minimum Rear Setback³ (Ft.): 25 FT

f. Maximum Floor Area Ratio: .5

g. Maximum Dwelling Units Per Acre: 25

h. Maximum Lot Coverage: 20%

i. Maximum Height⁴: 58 FT

j. Maximum Number of Stories: 4

3.16.7 Parking Requirements

- a. Notwithstanding anything in the By-Law to the contrary, for AHD Projects in the Affordable Housing District, the off-street parking requirement shall be .5 parking spaces per dwelling unit.
- b. For AHD Projects in the Affordable Housing District, the requirements of By-Law Section 5.1.3, Parking Plan and Design Requirements, shall apply.

3.16.8 Site Plan Review

- a. Site plan review under Section 7.4 of the By-Law shall be completed by the Planning Board for any AHD Project prior to the filing of an application for a building permit.
- b. For AHD Projects the site plan review filing requirements shall be those set forth in the By-Law for Major Projects as defined in Section 7.4.2.
- c. The procedure for the conduct of site plan review for an AHD project shall be as set forth in Section 7.4.4 of the By-Law.
- d. In conducting site plan review of an AHD project, the Planning Board shall consider the review criteria set forth in Section 7.4.6 of the By-Law.

the buffer area, but must be set back at least 10 feet from the front lot line, which setback shall provide a landscaped buffer.

² Parking areas must be set back at least 5 feet from a side lot line.

³ Parking areas must be set back at least 5 feet from a rear lot line.

⁴ Structures erected on a building and not used for human occupancy, such as chimneys, heating-ventilation or air conditioning equipment, solar or photovoltaic panels, elevator housings, skylights, cupolas, spires and the like may exceed the maximum building height provided that no part of such structure shall project more than 15 feet above the maximum allowable building height, the total horizontal coverage of all such structures, except roof-mounted solar energy systems, on the building does not exceed 25 percent, and all such structures are set back from the roof edge by a distance no less than their height. The Planning Board may require screening for such structures as it deems necessary. Notwithstanding the above height limitations, cornices and parapets may exceed the maximum building height provided they do not extend more than 5 feet above the highest point of the roof.

- 3. In Section 7.4 <u>Site Plan Review</u>, Subsection 7.4.2 <u>Definitions</u>, by adding a new paragraph after the paragraph defining MAJOR PROJECT, to read as follows:
 - "In the Affordable Housing District, a MAJOR PROJECT shall be defined as any construction project which involves the construction of 10,000 or more square feet of gross floor area; or increase in gross floor area by 5,000 or more square feet; or any project which results in the creation of 25 or more offstreet parking spaces; or any project that results in any new curb- or driveway-cut."
- 4. In Section 7.4 <u>Site Plan Review</u>, Subsection 7.4.2 <u>Definitions</u>, by adding a new paragraph after the paragraph defining MINOR PROJECT, to read as follows:

"In the Affordable Housing District, a MINOR PROJECT shall be defined as any construction project which involves the construction of more than 5,000 but less than 10,000 square feet gross floor area; or an increase in gross floor area such that the total gross floor area after the increase is 5,000 or more square feet – and the project cannot be defined as a MAJOR PROJECT.";

or take any other action relative thereto.

INSERTED BY: Planning Board FINANCE COMMITTEE RECOMMENDS THAT:

Article Information:

ARTICLE 19: AMEND ZONING BY-LAW – MAP CHANGE FOR AFFORDABLE HOUSING DISTRICT

To see if the Town will vote to amend the Zoning By-Law by amending the Zoning Map as follows:

Place in the Affordable Housing District all that land now zoned Single Residence B and General Residence lying east of Linden Street, comprising parcels 23 and 24, on Assessors Map No. 133, parcel 41 on Assessors Map No. 134, and parcel 13 on Assessors Plan No. 45. Said land is bounded and described as follows:

Beginning at a concrete bound at the northwesterly corner of the property, on the easterly side of Linden Street; Thence, S 83° 26' 20" E for a distance of 107.02 feet to an iron rod; Thence, S 82° 15' 50" E for a distance of 87.89 feet to a concrete bound; Thence, S 08° 56' 11" W for a distance of 328.80 feet to a point; Thence, S 42° 44′ 39" E for a distance of 159.58 feet to a point; Thence, S 23° 11′ 00" W for a distance of 275.88 feet to a point; Thence, S 14° 57' 44" W for a distance of 199.48 feet to a point; Thence, S 86° 04' 45" E for a distance of 59.86 feet to a point; Thence, S 88° 37' 00" E for a distance of 37.49 feet to a point; Thence, S 86° 19' 44" E for a distance of 140.96 feet to a point; Thence, S 86° 19' 44" E for a distance of 26.25 feet to a point; Thence, along a curve turning to the right, having a radius of 2817.93 feet, a distance of 716.25 feet to a point; Thence, S 37° 38' 40" W for a distance of 530.86 feet to a point; Thence, N 52° 24' 02" W for a distance of 175.47 feet to a point; Thence, N 74° 08' 46" W for a distance of 39.96 feet to a point; Thence, N 21° 18' 16" E for a distance of 70.00 feet to a point; Thence, N 72° 56' 42" E for a distance of 165.00 feet to a point; Thence, N 59° 35' 49" E for a distance of 116.66 feet to a point; Thence, N 40° 49' 41" E for a distance of 118.66 feet to a point; Thence, N 21° 56' 08" E for a distance of 118.67 feet to a point; Thence, N 02° 41' 11" E for a distance of 122.65 feet to a point; Thence, N 09° 25' 32" W for a distance of 271.23 feet to a point; Thence, N 43° 37' 54" E for a distance of 103.44 feet to a point; Thence, N 20° 01' 11" E for a distance of 112.07 feet to a point; Thence, N 86° 04' 45" W for a distance of

22.72 feet to a point; Thence, N 78° 30' 10" W for a distance of 108.86 feet to a point; Thence, N 10° 27' 40" E for a distance of 823.79 feet to a point; Thence N 08° 57' 40" E a distance of 71.55 feet to the point of beginning.

Said parcel contains four hundred seventy-nine thousand two hundred fifty-four square feet more or less (479,254 S.F.); or take any other action relative thereto.

INSERTED BY: Planning Board FINANCE COMMITTEE RECOMMENDS THAT:

Article Information:

ARTICLE 20: AMEND ZONING BY-LAW – SOLAR ENERGY SYSTEMS

To see if the Town will vote to amend the Zoning By-Law as follows:

- 1. In Section 1.3 <u>Definitions</u>, by adding the following terms and definitions in the appropriate alphabetical location as follows:
 - <u>"Solar Energy System"</u> a device or structural design feature, a substantial purpose of which is to provide daylight for interior lighting or provide for the collection, storage, and distribution of solar energy for space heating or cooling, electricity generation, or water heating. Solar Energy Systems include the following system types:
 - 1. A Solar Energy System, Active: A solar energy system whose primary purpose is to harvest solar energy into another form of energy or to transfer heat from a collector to another medium using mechanical, electrical, or chemical means. Active Solar Energy Systems include, but are not limited to, the following installation types:
 - a) <u>Solar Energy System, Building-mounted:</u> An Active Solar Energy System that is structurally mounted to a building or structure.
 - b) <u>Solar Energy System, Roof-mounted:</u> A special application of a Building-mounted Solar Energy System that is structurally mounted to the roof of a building or structure.
 - c) <u>Solar Energy System, Building-mounted Canopy:</u> A special application of a Building-mounted Solar Energy System that is installed on top of a building with a flat roof that maintains the function of the area beneath the canopy.
 - d) <u>Solar Energy System, Ground-mounted:</u> An Active Solar Energy System that is structurally mounted to the ground.
 - e) <u>Solar Energy System, Small-Scale Ground-mounted:</u> A Ground-mounted Solar Energy System that occupies 1,500 square feet of surface area or less.
 - f) <u>Solar Energy System, Medium-Scale Ground-mounted:</u> A Ground-mounted Solar Energy System that occupies more than 1,500 square feet, but less than 40,000 square feet of surface area.

- g) <u>Solar Parking Canopy</u>: A special application of a Ground-mounted Solar Energy System that is installed on top of a parking surface or paved surface that maintains the function of the area beneath the canopy.
- h) Solar Energy System, Building-integrated Photovoltaic (BIPV): An Active Solar Energy System that consists of integrating solar photovoltaic (PV) modules into the surface of a building or structure, where the solar panels themselves function as, or are integrated into, a building material (i.e., roof shingles, siding, windows, skylights) or structural element (i.e., façade). The generation of solar energy is secondary to the function of the building material or structural element.
- i) <u>Solar Energy System, Surface-integrated</u>: An Active Solar Energy System that is not building-mounted and is integrated into a ground level surface, such as a driveway, walkway, patio surface, path, or parking area, where the solar panels themselves function as, or are integrated into, the surface material. The generation of solar energy is secondary to the function of the surface element.
- 2. <u>Solar Energy System, Passive</u>: A Solar Energy System that captures solar light or heat without transforming it to another form of energy or transferring the energy via a heat exchanger."
- 2. Amend Section 6, <u>Special Regulations</u>, by adding a new Subsection 6.13 <u>Accessory Uses Solar Energy Systems</u>, to read as follows:
 - "6.13 Accessory Uses Solar Energy Systems

6.13.1 Basic Requirements

- a) Roof-mounted Solar Energy Systems shall be permitted in all use districts as-of-right. The installation of Roof-mounted Solar Energy Systems that: (i) comply with the regulations provided in this section; (ii) are located on properties with nonconforming uses or structures; and (iii) do not increase the nonconformity of such nonconforming uses or structures except with respect to the dimensions of the Roof-mounted Solar Energy System in question shall not be considered a change, extension or alteration that requires a finding by the Zoning Board of Appeals per M.G.L. c.40A s.6.
- b) In residential districts: Small-scale Ground-mounted Solar Energy Systems shall be permitted in rear and side yards as-of-right at the District-level setback as defined in Section 6.13.2.c)4). Small-scale Ground-mounted Solar Energy Systems may be permitted in the front yard by a Special Permit from the Board of Appeals at the applicable District-level setback as defined in Section 6.13.2.c)4). Screening or landscaping of such systems from view from abutting lots or from a street, by plantings, walls, fences or other devices shall be provided. Solar Parking Canopies shall be permitted in rear and side yards as-of-right. Medium-scale Ground-mounted Solar Energy Systems shall be permitted in the rear and side yards as-of-right subject to site plan review by the Planning Board.
- c) In nonresidential districts: Small-scale Ground-mounted Solar Energy Systems shall be permitted in rear and side yards as-of-right. Medium-scale Ground-mounted Solar Energy Systems and Solar Parking Canopies are permitted in the rear and side yards as-of-right subject to site plan review by the Planning Board. The same regulations shall apply in residential districts for uses allowed by operation of M.G.L. c.40A s.3, or other state and federal statutes.

- d) In the New England Business Center (NEBC) District, Mixed Use-128 (MU-128) District and in the portion of the Highland Commercial-128 (HC-128) District located a) north of Highland Avenue and b) south of Highland Avenue and west of Second Avenue: Solar Energy Building-mounted Canopy Systems are permitted as-of-right subject to site plan review by the Planning Board. In the Business (B), Chestnut Street Business (CSB), Center Business (CB), Avery Square Business ASB), Hillside Avenue Business (HAB), Neighborhood Business (NB), Elder Services (ES), Industrial (I), Industrial-1 (IND-1), Highway Commercial 1 (HC-1), and Institutional (I) districts Solar Energy Building-mounted Canopy Systems are permitted by special permit subject to site plan review by the Planning Board.
- e) BIPV Solar Energy Systems and Surface-integrated Solar Energy Systems shall be permitted as of right as part of any use or site otherwise allowed in any zoning district.

6.13.2 Dimensional Requirement

a) Maximum Percentage (%) Lot Coverage

- 1) For the purpose of regulating lot coverage, the area of Active Solar Energy Systems shall count toward the Maximum Percentage (%) Lot Coverage as defined and regulated in the Dimensional Regulations provided in Section 4 of the Needham Zoning By-Laws.
- 2) An Active Solar Energy System's contribution toward Maximum Percentage (%) Lot Coverage shall be calculated as the total area of the system's panels. For example, if a system includes ten (10) panels that are each three (3) feet by five (5) feet, the system's contribution to Maximum Percentage (%) Lot Coverage would equal 150 square feet.
- 3) Such part of a Building-mounted Solar Energy System or Solar Parking Canopy that extends beyond the impervious area over which it is placed shall count toward Maximum Percentage (%) Lot Coverage.
- 4) For Ground–mounted Solar Energy Systems, the total surface area of the Solar Energy System shall count toward Maximum Percentage (%) Lot Coverage.
- 5) To avoid double counting, the surface area of any Active Solar Energy System that is above an existing impervious surface shall <u>not</u> be included in the calculation of Maximum Percentage (%) Lot Coverage (i.e. the addition of a Roof-mounted Solar Energy System shall <u>not</u> increase the calculated Maximum Percentage Lot Coverage on a lot because it will be located within a surface area the building's footprint that is already counted).

b) Height

1) Building-mounted Solar Energy Systems:

System Type	Roof Pitch	Siting	Maximum Height
Roof mounted Solar Energy System	Pitch is greater than or equal to 3.2:12 (a fifteen (15) degree angle)	All districts	Roof-mounted Solar Energy Systems may extend up to one (1) foot above the roof surface on which the system is installed beyond applicable building height limits. Systems shall be surface-mounted and installed parallel to the roof surface.
Roof-mounted Solar Energy System	Pitch is less than 3.2:12 (a fifteen (15) degree angle)	All districts	Roof-mounted Solar Energy Systems may extend up to three (3) feet above the roof surface on which the system is installed beyond applicable building height limits. If the surface on which the system is to be mounted is below maximum building height, the Roof-mounted Solar Energy System may extend up to six (6) feet above the roof surface on which the system is installed, provided it does not exceed building height limits by more than three (3) feet; and provided further that any Roof-mounted Solar Energy System that extends more than three (3) feet above the roof surface on which the system is installed must be installed at least three (3) feet from the roof's edge.
Building-mounted Canopy Solar Energy System	Flat Roof with predominately zero pitch	NEBC, MU-128 & HC-128 districts	May extend up to fifteen (15) feet above the roof surface on which the system is installed beyond applicable building height limits.
	5	Municipal buildings in all districts	
Building-mounted Canopy Solar Energy System	Flat Roof with predominately zero pitch	B, CSB, CB, ASB, HAB, NB, ES, IND, IND-1, HC-1 &I districts	May extend up to fifteen (15) feet above the roof surface on which the system is installed up to the applicable building height limit of the district.

Other	Not	All	No greater than the highest point of the roof.
Building-mounted	Applicable	districts	
Solar Energy			
System (e.g.,			
awnings)			

2) Ground-mounted Solar Energy Systems:

System Type	Siting	Maximum Height
Small-Scale	SRB & GR	Eight (8) vertical feet from grade.
Ground-mounted Solar Energy	districts	
System	All other districts	Ten (10) vertical feet from grade.
Medium-Scale	SRB & GR	Eight (8) vertical feet from grade.
Ground-mounted Solar Energy	districts	
System	All other districts	Ten (10) vertical feet from grade.
Solar Parking	All districts	Seventeen (17) vertical feet from grade.
Canopy		

c) Setbacks

- Ground-mounted Solar Energy Systems that move along an axis, unfold, or open shall be located so that the entirety of the equipment's reach at all angles falls within the setback requirements.
- 2) Solar Parking Canopies in residential districts shall meet setback requirements for Accessory Structures.
- 3) Solar Parking Canopies and Surface-integrated Solar Energy Systems in non-residential zones shall be allowed where parking is permitted in accordance with the requirements defined in Section 5.1.3, Parking Plan and Design Requirements. The requirements for the planting of trees in landscaped strips within the parking area as defined in Section 5.1.3, Paragraphs (k) Landscape Areas and Paragraph (l) Trees may be met elsewhere on the lot. Landscaping for parking lots located under a canopy shall be designed to manage runoff from the panels and to be shade tolerant.
- 4) All other Ground-mounted Solar Energy Systems shall meet the requirements for Setbacks of principal structures as defined in Section 1.3 and Section 4.2 of the Needham Zoning By-Laws, as regulated for each use district in Section 4 ("District-level setback") provided, however, that a Small-Scale Ground-mounted Energy System in the Rural Residence-Conservation, Single Residence A, Single Residence B, and General Residence Districts located in a side or rear yard may instead meet the setback requirements applicable to accessory structures under

Section 4.2.9. A Small-Scale Ground mounted Solar Energy System constructed nearer to any lot line than the Setback applicable to a principal structure pursuant to the forgoing provision shall require screening or landscaping of such systems from view from abutting lots and/or from a street, by plantings, walls, fences or other devices with said screening having a minimum height of six feet.

5) Any extension of a Building-Mounted Solar Energy System shall comply with the setback requirements for that building.

6.13.3 <u>Supplemental Regulations</u>

- a) BIPV Solar Energy Systems and Surface-integrated Solar Energy Systems shall be subject to any requirements in the Needham Zoning By-Laws that relate to the material or structural element into which the system is integrated or functions as. For example, solar roofing would be subject to regulations for roofing; solar pavement would be subject to regulations for pavement.
- b) The impervious portion of Ground-mounted Solar Energy Systems and Surface-integrated Solar Energy Systems shall be subject to any requirements in the Needham Zoning By-Laws that relate to paving, including impervious lot coverage requirements within the Aquifer Protection District. The systems shall also comply with regulations identified in the Town of Needham's Stormwater By-Law, Article 7 of the General By-Laws.

6.13.4 Site Plan Review

- a) Site Plan Review: Medium-scale Ground-mounted Solar Energy Systems in all districts, Solar Parking Canopies in non-residential districts, and Solar Energy Building-mounted Canopy Systems in the New England Business Center, Mixed Use 128, and Highland Commercial-128 districts, are subject to site plan review by the Planning Board prior to construction, installation or modification as provided in this section and in accordance with Section 7.4 Site Plan Review. In reviewing a Special Permit application under Section 6.13.1 b) the Board of Appeals shall also apply the Site Plan Review Document Requirements of Section 6.13.4 b) and the Site Plan Review Design Standards of Section 6.13.3 c). In reviewing a Special Permit application under Section 6.13.1 d) the Planning Board shall also apply the Site Plan Review Document Requirements of Section 6.13.4 b) and the Site Plan Review Design Standards of Section 6.13.3 c).
- b) Site Plan Review Document Requirements: The project proponent shall provide a Final Site Plan to the Planning Board in compliance with Section 7.4 Site Plan Review, Subsection 7.4.4.Procedure. In addition, applicants shall submit the following:
 - 1) Name, address, and contact information for proposed system installer.
 - 2) Name, address, contact information and signature of the project proponent, as well as all co-proponents or property owners, if any.
 - 3) The name, contact information and signature of any agents representing the project proponent.
 - 4) Proposed changes to the landscape of the site, grading, vegetation clearing and planting, exterior lighting, screening vegetation or structures.

- 5) Blueprints or drawings of the solar energy system showing the proposed layout of the system, any potential shading from nearby structures, the distance between the proposed solar collector and all property lines and existing on-site buildings and structures, and the tallest finished height of the Solar Energy System.
- 6) All submitted plans must be stamped by electrical, civil, and structural engineers or architects and landscape architects for their respective scope of work. Systems that are installed on existing structures must have a structural analysis stamped by a Professional Engineer that demonstrates the structure can handle the additional deadloads of the system as well as uplift wind loads per the local and state building codes.
- 7) Ground mounted solar structures must include geotechnical reports and engineering of any foundations associated with the new solar system per local and state building codes.
- 8) Plans must include stormwater analysis with erosion control plans for proposed solar systems as well as stormwater control measures. Site modifications must meet the current stormwater by-laws for stormwater infiltration requirements. Impervious areas will include all impervious surfaces associated with the new solar system.
- 9) Documentation of the major system components to be used, including the panels, mounting system, and inverter.
- 10) Operation and Maintenance Plan including measures for maintaining safe access to the installation, stormwater controls, as well as general procedures for operational maintenance of the installation.
- 11) Locations of active farmland, permanently protected open space, Priority Habitat Areas and BioMap 2 Critical Natural Landscape Core Habitat mapped by the Natural Heritage & Endangered Species Program (NHESP) and "Important Wildlife Habitat" mapped by the Massachusetts Department of Environmental Protection (MassDEP) in relation to the site.
- c) Site Plan Review Design Standards: The Planning Board shall consider the following criteria and standards, in addition to those listed in Section 7.4.6, Review Criteria for Site Plan Review when reviewing site plan submittals made under this section:
 - 1) Utility Notification: No solar photovoltaic system shall be installed until evidence has been given to the Planning Board that the owner has submitted notification to the utility company of the customer's intent to install an interconnected customerowned generator. Off-grid systems are exempt from this requirement.
 - 2) Utility Connections: Reasonable efforts, as determined by the Planning Board, shall be made to place all utility connections from the solar photovoltaic installation underground, depending on appropriate soil conditions, shape, and topography of the site and any requirements of the utility provider. Electrical transformers for utility interconnections may be above ground if required by the utility provider.
 - 3) Safety: The owner or operator shall provide a copy of the Site Plan Review application to the Needham Fire Department and shall cooperate with local emergency services in developing an emergency response plan. All means of shutting down the solar installation shall be clearly marked. The owner or operator

- shall identify a person responsible for responding to municipal officials, throughout the life of the installation.
- 4) Height and Layout: The Planning Board shall also review the height and physical layout of the Solar Energy Systems, utility connections, and appurtenant infrastructure as it relates to the convenience and safety of emergency vehicles, private vehicles and pedestrian movement on the site.
- 5) Visual Impact: Reasonable efforts, as determined by the Planning Board, shall be made to minimize visual impacts by preserving natural vegetation, screening abutting properties, or other appropriate measures.
- 6) Land Clearing, Soil Erosion and Habitat Impacts: Clearing of natural vegetation shall be limited to what is necessary for the construction, operation and maintenance of ground-mounted solar energy systems or as otherwise prescribed by applicable laws, regulations, and By-Laws.
- 7) Stormwater: The Planning Board shall review the existing and post stormwater analysis to meet the current stormwater by-law infiltration requirements.
- 8) Lighting: The Planning Board shall review the physical lighting of the site, including the methods of exterior lighting for convenience, safety and security within the site, and in consideration of impacts of neighboring properties and excessive light pollution. Where feasible, lighting of the Solar Energy System shall be directed downward and shall incorporate full cut-off fixtures to reduce light pollution."
- 3. Amend Section 4.2 <u>Dimensional Regulations for Rural Residence-Conservation, Single Residence A, Single Residence B, General Residence, and Institutional Districts, Subsection 4.2.8 <u>Height Limitation Exceptions</u>, by deleting from the second sentence of the first paragraph the phrase "solar panels," so that the sentence shall now read as follows:</u>
 - "In the case of schools and other municipal buildings, structures erected on a building and not used for human occupancy, such as chimneys, heating-ventilating or air-conditioning equipment, mechanical equipment, mechanical flues or exhausts, elevator housings or equipment, generators, roof access, stairway enclosures, skylights, and the like may exceed the maximum building height provided that no part of such structure or equipment shall project more than 15 feet above the maximum allowable building height and the total horizontal coverage of all of such structures or projections on the building does not exceed thirty-three percent (33%) of the total roof area of the building."
- 4. Amend Section 4.2 <u>Dimensional Regulations for Rural Residence-Conservation, Single Residence A, Single Residence B, General Residence, and Institutional Districts, Subsection 4.2.8 <u>Height Limitation Exceptions</u>, by deleting the fourth sentence of the first paragraph which reads as follows:</u>
 - "Further provided, subject to the 15-foot maximum height limitation cited above, solar panels shall also be allowed on rooftops of schools and other municipal buildings with no limitation on the roof area coverage provided such panels are set back from the edge of the roof a distance at least equal to the height of the panel."
- 5. Amend Section 4.5 <u>Dimensional Regulations for Highland Commercial-128</u>, Subsection (3), by deleting from the fourth sentence of said subsection the phrase "solar or photovoltaic panels," so that the sentence shall now read as follows:
 - "Structures erected on a building and not used for human occupancy, such as chimneys, heating-ventilating or air-conditioning equipment, elevator housings, skylights, cupolas, spires and the like

may exceed the maximum building height provided that no part of such structure shall project more than 15 feet above the maximum allowable building height, the total horizontal coverage of all of such structures on the building does not exceed 25 percent, and all of such structures are set back from the roof edge by a distance no less than their height."

- 6. Amend Section 4.8 <u>Dimensional Regulations for NEBC</u>, Subsection (1), by deleting from the fourth sentence of said subsection the phrase "solar or photovoltaic panels," so that the sentence shall now read as follows:
 - "Structures erected on a building and not used for human occupancy, such as chimneys, heating-ventilating or air-conditioning equipment, elevator housings, skylights, cupolas, spires and the like may exceed the maximum building height provided that no part of such structure shall project more than 15 feet above the maximum allowable building height, the total horizontal coverage of all of such structures on the building does not exceed 25 percent, and all of such structures are set back from the roof edge by a distance no less than their height, provided that the Planning Board may by Special Permit increase the height limit by not more than 5 additional feet."
- 7. Amend Section 4.9 <u>Dimensional Regulations for Mixed-Use 128</u>, Subsection (1), by deleting from the fourth sentence of said subsection the phrase "solar or photovoltaic panels," so that the sentence shall now read as follows:

"Structures erected on a building and not used for human occupancy, such as chimneys, heating-ventilating or air conditioning equipment, elevator housings, skylights, cupolas, spires and the like may exceed the maximum building height provided that no part of such structure shall project more than 15 feet above the maximum allowable building height, the total horizontal coverage of all of such structures on the building does not exceed 25 percent, and all of such structures are set back from the roof edge by a distance no less than their height."

Or take any other action relative thereto.

INSERTED BY: Planning Board FINANCE COMMITTEE RECOMMENDS THAT:

Article Information:

COMMUNITY PRESERVATION ACT ARTICLES

ARTICLE 21: APPROPRIATE FOR HIGH SCHOOL TENNIS COURTS

To see if the Town will vote to raise and/or transfer and appropriate the sum of \$2,600,000 for improvements to the Needham High School tennis courts, said sum to be spent under the direction of the Town Manager, and to meet this appropriation that \$1,440,000 be transferred from CPA Free Cash, \$1,000,000 be transferred from the Athletic Facility Stabilization Fund, \$149,196 be transferred from Overlay Surplus, and \$10,804 be transferred from Article 43 of the 2015 Annual Town Meeting; or take any other action relative thereto.

INSERTED BY: Community Preservation Committee FINANCE COMMITTEE RECOMMENDS THAT:

<u>Article Information</u>: This funding would provide for the renovation of the current four courts and installation of four new tennis courts at Needham High School. All courts include post-tension concrete as

the base. Post-tension concrete is now an industry norm as the warranty on post-tension concrete is 25+ years. An asphalt-based tennis court has a 5- to 7-year warranty with many factors influencing surface deterioration.

ARTICLE 22: APPROPRIATE FOR LINDEN STREET REDEVELOPMENT

To see if the Town will vote to raise and/or transfer and appropriate the sum of \$5,500,000 for the Linden Street Redevelopment Project, to be spent under the direction of the Town Manager, and to meet this appropriation that said sum be transferred from CPA Funds/Receipts; or take any other action relative thereto.

INSERTED BY: Community Preservation Committee FINANCE COMMITTEE RECOMMENDS THAT:

Article Information:

ARTICLE 23: APPROPRIATE FOR DEFAZIO COMPLEX FENCING

To see if the Town will vote to raise and/or transfer and appropriate the sum of \$417,000 for the DeFazio Complex Fencing Project, to be spent under the direction of the Town Manager, and to meet this appropriation that said sum be transferred from CPA Funds/Receipts; or take any other action relative thereto.

INSERTED BY: Community Preservation Committee FINANCE COMMITTEE RECOMMENDS THAT:

Article Information: This funding is to remove and replace the fencing around the DeFazio Complex. The perimeter fencing, backstops, and player bench areas are showing signs of age and heavy use. These fields are subjected to high levels of traffic that have shortened the life cycle of fencing and related structures. The existing fence posts will be evaluated for damage and will be reused if possible. The existing chain link fabric will be disposed of and replaced in kind.

ARTICLE 24: APPROPRIATE FY2025 CPA RESERVES

To see if the Town will vote to hear and act on the report of the Community Preservation Committee; and to see if the Town will vote to appropriate a sum pursuant to Massachusetts General Law Chapter 44B from the estimated FY2025 Community Preservation Fund revenues, or to set aside certain amounts for future appropriation, to be spent under the direction of the Town Manager, as follows:

Appropriations:

Administrative and Operating Expenses of the Community Preservation Committee:

82,000

Reserves:

B. Community Preservation Fund Annual Reserve: \$1,187,215
C. Community Housing Reserve: \$872,545

D. Historic Resources Reserve:

E. Open Space Reserve

\$ 0 \$ 436,273

or take any other action relative thereto.

INSERTED BY: Community Preservation Committee FINANCE COMMITTEE RECOMMENDS THAT:

Article Information: Town Meeting and voters approved the Community Preservation Act in 2004. The Fund receives monies through a 2.0% surcharge on local real estate property tax bills with certain exemptions. Adoption of the Act makes the Town eligible to receive additional monies on an annual basis from the Massachusetts Community Preservation Fund. Any expenditure from the Community Preservation Fund must be both recommended by the Community Preservation Committee (CPC) and approved by Town Meeting. The law requires that at least 10% of the revenue be appropriated or reserved for future appropriation for each of the following purposes: community housing, historic preservation and open space. The Town traditionally sets aside 11% of the estimated fiscal year receipts to account for any changes to the revenue estimate or State match that may occur during the year. The CPC has voted to increase the amount set aside in the Community Housing Reserve to 22% of the estimated revenue for the year to ensure that at a minimum of 20% of the actual CPA receipts are appropriated or reserved for future appropriation for Community Housing. Up to 5% of the annual revenue estimate may be utilized for the administrative and operational expenses of the Community Preservation Committee. At the end of the fiscal year, unspent administrative funds return to the CPA Fund.

CAPITAL ARTICLES

ARTICLE 25: APPROPRIATE FOR GENERAL FUND CASH CAPITAL

To see if the Town will vote to raise and/or transfer and appropriate the sum of \$4,739,438 for General Fund Cash Capital, to be spent under the direction of the Town Manager, and to meet this appropriation that said sum be transferred from Free Cash; or take any other action relative thereto.

Group	Description	Recommended	Amendment
Community Services	Library Renovation Young Adult Area	\$454,000	
Community Services	Library Technology	\$47,000	
General	Non-Public Safety & Public Safety Data Centers & Networking Equipment	\$600,000	
General	Powers Hall IT and AV	\$220,000	
General	Town Building Security and Traffic Cameras	\$190,000	

	Total	\$4,739,438	
Multiple	Fleet Program	\$960,887	
Transportation Network	Electric Vehicle Charging Stations	\$800,000	
Transportation Network	Transportation Safety Committee Improvements (Traffic Improvements)	\$100,000	
Schools	School Technology	\$661,150	
Schools	School Furniture	\$25,000	
Schools	School Copiers	\$66,767	
Schools	Newman Preschool Playground	\$54,000	
Schools	High School Fitness Center Equipment	\$32,673	
Schools	Eliot Boiler		
Public Works	Sustainable Building Retrofit Program	\$100,000	
Public Works	Specialty Equipment	\$180,000	
Public Works	Geographic Information System Equipment	\$75,000	
Public Safety	Personal Protective Equipment	\$54,290	
Public Safety	LIFEPAK 15 V4 Monitor/Defibrillator	\$44,671	
General	Town Facility Replacement Furniture and Office Fixtures	\$40,000	

INSERTED BY: Select Board FINANCE COMMITTEE RECOMMENDS THAT:

Article Information:

Town Facility Replacement Furniture and Office Fixtures

This funding request is for the replacement of furniture in Town Hall and the Public Services Administration Building. These facilities were equipped with new furniture when they reopened and opened in 2011 and 2010 respectively. In FY2025, some furniture will be well over 10 years old, and many items require replacement due to heavy wear and tear.

Powers Hall IT and AV

This funding will support updating IT and AV equipment and infrastructure in and supporting Powers Hall. While some IT and AV assets are and will continue to be replaced relatively easily on an as-needed basis, larger updates are required to improve reliability and usability for the coming decades. This project

includes both the design and build phases. The design phase will permit a full scope design of both the required improvements and the requisite facilities modifications needed to facilitate the improvements. The build phase will implement the design.

Non-Public Safety and Public Safety Data Centers and Networking Equipment Replacement

This funding request is for the replacement of servers, storage units, data center switching, a network core switch, firewalls, and services for installation needed in the Town Hall data center (Data Center 1), Public Safety Building data center (Data Center 2) and Public Services Administration Building (Staging 1). Data Center 1 is the primary data center where Town Departments access files and programs, the internet, and where network and internet security take place, Data Center 2 acts as fail over in case the Town Hall network and infrastructure go offline and will require duplicate hardware as designed for Data Center 1. Staging 1 is being delegated as a location for file staging prior to Fiscal Year 2025 Proposed Budget backing up to the cloud. The servers and storage units in Data Center 1, as well as in Data Center 2, are physical devices that support over 120 virtual servers with corresponding data maintained on the storage units. There are other physical servers that are for specific software solutions such as financial operations.

Town Building Security and Traffic Cameras Replacement

This funding request is for the replacement and upgrade of traffic cameras and security cameras at intersections and buildings. Traffic cameras are currently located at two intersections downtown, Great Plain at Chapel and Chestnut, and Great Plain at Highland and Dedham. The downtown intersections are both traffic management control and equipped with cameras. The traffic control cameras, at the time of installation, were low resolution and will be updated to cameras with higher resolution to better help control traffic. The security cameras are not only for the intersections above which have been added over the last ten years during construction and retrofitting across the Town at multiple municipal buildings and locations. Each building with security cameras also maintains a Digital Video Recorder which currently are backed up through the local area network to a storage unit in the Public Services Administration Building (Staging 1). The cameras installed on municipal buildings are high resolution cameras used for maintaining the security of the buildings and properties. The Town is pursuing several different funding opportunities for improving the traffic cameras, so the recommended funding is for building security cameras only.

Personal Protective Equipment

This funding request will replace Personal Protective Equipment (PPE) – known as "bunker gear" – for 20% of all firefighting personnel on an annual basis. This is to ensure the life span of the equipment does not exceed the 10-year guideline. All line personnel now have two sets of PPE available. By having a second set of PPE, fire personnel are able to clean one set after an incident while remaining in service for other emergencies. Properly maintaining PPE helps ensure its expected longevity and can significantly reduce long term health risks faced by personnel.

Lifepak 15 V4 Monitor/Defibrillator

This funding request will replace lifesaving hardware for public safety personnel. The Physio Lifepak 15 (LP15) is the cardiac monitor/defibrillator that the Department uses on frontline rescues. The Department has two frontline rescues with two backup units. The average lifespan for this piece of equipment is estimated to be about five years.

Newman Preschool Playground Update With Shade Structure

This funding request is for the additional funds required to install a shade structure that also functions as climbing equipment and to replace the existing poured-in-place surface. The estimated cost of the renovated playground is \$228,800, toward which the School Department proposes to apply the \$69,200 previously appropriated for a custom shade shelter (Article 37 of the 2019 Annual Town Meeting), as well as \$105,600

in reserved fund balance from the Preschool Revolving Fund. The additional amount required to complete this project is \$54,000.

Needham High School Fitness Center Equipment Replacement

This funding request is for the purchase of equipment for the Needham High School Fitness Center, which is undergoing modernization to increase student use, improve accessibility, and better meet student needs. This request anticipates that \$25,000 in offsetting funds will be available.

School Copier Replacement

This funding request is to replace three copiers in the following locations: Production Center, Emery Grover, and Needham High School. School photocopiers in all school buildings are used both by administrative and teaching staff. Copiers which are heavily used are replaced more frequently than copiers that are lightly used. The average life cycle is calculated at seven years, although planned replacement ages range from five to nine years, depending on use. It is important to replace machines regularly, even if they have not yet reached maximum copy allowances, given the additional operating expense associated with servicing and maintaining older equipment, as well as the difficulty in obtaining replacement parts. This analysis also assumes that copiers are re-deployed around the District as needed, to better match projected usage with equipment capacity.

School Furniture

This funding request is a recurring capital item to replace furniture in poor and fair condition and to provide new classroom furniture as needed for new enrollment or replacement purposes.

School Technology

This funding request is a recurring capital item to fund the School Department technology replacement program. This program funds replacement of desktop computers, printers, classroom audio visual devices, specialized instructional labs, projectors, video displays, security cameras and electronic door access controllers. The request also incorporates funding for school technology infrastructure, which consists of servers, network hardware, wireless infrastructure, data cabling and access points. The FY2025 School Technology request includes \$548,150 for hardware and \$113,000 for infrastructure replacement.

Electric Vehicle Charging Stations

This request is for funding of up to three Level 3 chargers to be spent for purchasing and installing these chargers at the Newman School for the anticipated addition of electric buses in the School Department's fleet. It is also to fund additional Level 3 chargers at other locations throughout Town where deemed appropriate. Level 3 chargers are used to charge mid-sized vehicles more quickly or to feasibly charge larger trucks and high-capacity passenger vehicles. Funding is also included to fund at a minimum one Level 2 charger which are used for regular passenger vehicles and smaller trucks. The Town will purchase and install additional chargers if outside funding is received for either of these projects.

DPW Specialty Equipment

This request is for large equipment that fits the definition of capital but is not included in the fleet request because the equipment is not a registered vehicle. Specialty equipment proposed for FY2025 includes a John Deere Gator (\$32,400) and a Smithco Super Start Renovator (\$31,400) for the Parks & Forestry Division, as well as a Dynapac Roller (\$55,700) and a Salso Paver (\$60,500) for the Highway Division.

Eliot Boiler Replacement Design

This request is for the design phase of the project to replace both boilers at the Eliot School. The design for the replacements would include high efficiency condensing boilers. This setup would both improve the

performance and reliability of the boilers and the energy efficiency of the system. This request has been advanced from FY2026 to FY2025 due to the continued deterioration of the boilers warranting more frequent and increasingly expensive repairs.

Sustainable Building Retrofit Program

This request is for lighting upgrade projects at the Broadmeadow and High Rock schools, converting their existing outdated lighting to high-efficiency LED systems. Similar projects have been successfully completed in the past few years at the Pollard, Newman, Mitchell, and Hillside schools, and these projects would be modeled on those. Building Maintenance plans to continue these lighting upgrade projects at all Town and School buildings wherever feasible to reduce energy consumption and to take advantage of state programs that subsidize their cost. Any funds as available will be used to supplement grant funding that may become available to assist in identifying plans and best practices on how to sustainability update the Town's buildings. This request was previously submitted as "Energy Efficiency Upgrades". The project title change is to reflect the more holistic purpose of the projects.

GPS Equipment

This request is for the purchase, installation, maintenance, and service of replacement GPS units fleet-wide (approximately 80 units) that are compatible with the modern software platform. These new units will restore DPW's ability to generate reporting on the locations of its assets and operators. The replacement units would also allow the ability to physically integrate with the vehicles' systems with reporting features designed to support snow fighting operations.

Library Renovation: Young Adult Area Design

This request is for the design phase of a project to expand and improve the young adult area. Recommendations from the Utile space study that would be further detailed in the design phase include: an expanded footprint of the young adult area on the second floor, installing glass walls and doors to enclose the young adult space while maximizing daylight and providing visibility, removing the built-in desk in the existing teen room, providing a variety of seating options for groups and individuals, improving the HVAC systems in the young adult area, addressing acoustic impacts of the young adults on the rest of the library, and adding a dedicated young adult staff desk.

Library Technology Plan

This request is for the replacement of self-check stations, catalog computers and monitors, Chromebooks and laptops, a pay-station computer and monitor, and gaming systems.

Transportation Safety Committee Projects

This request is for funding construction-related transportation safety projects and interventions in response to resident petitions, including roadway geometry changes, accessibility ramps, crosswalks, flashing LED pedestrian signs, speed radar signs, "Stop", "School Zone", and "Children Playing" signs, and other pedestrian improvements. In 2023, the committee transitioned from the Traffic Management Advisory Committee (TMAC) to the Transportation Safety Committee (TSC), which has a wider scope and range of interventions. The amount has increased by \$50,000 annually to address the additional needs coming from the TSC as well as the estimated increase in costs to complete the proposed projects.

General Fund Core Fleet Replacement

Unit	Existing	Division	Year	Replacement	Amount
703	Ford Transit	DPW Building	2015	Utility Van	\$81,647
	Connect Cargo	Maintenance		(Electric)	
302	N/A	DPW Parks	N/A	Small Pickup	\$50,880
		and Forestry			
C-43	Ford Escape	Fire	2017	Public Safety	\$72,523
		Department		Response	
				Vehicle	
588	Ford F-150	Police	2014	Work Truck	\$82,902
		Department		Class 3	
New	N/A	Needham	N/A	Utility Van	\$66,388
		Public Schools		with Lift	

<u>General Fund Fleet Replacement – Specialized Equipment</u>

Unit	Existing	Division	Year	Replacement	Amount
72	Ford F550	DPW Parks	2015	Work Truck	\$152,142
	Superduty	and Forestry		Class 5 Chip	
				Box	
74	Ford F550	DPW Parks	2016	Work Truck	\$116,996
	Superduty	and Forestry		Class 5	
350	John Deere	DPW Parks	2010	Work Truck	\$68,229
	Tractor Loader	and Forestry		Class	
				Specialty	
				Tractor	
61	Genie Forklift	DPW RTS	2013	Forklift	\$149,884
89T	Warren Open-	DPW RTS	2017	Specialty	\$119,296
	Top Trailer			Trailer	

ARTICLE 26: APPROPRIATE FOR POLLARD MIDDLE SCHOOL FEASIBILITY STUDY/MSBA

To see if the Town will vote to raise and/or transfer and appropriate the sum of \$2,750,000 for the purpose of paying costs of a feasibility study of the Pollard Middle School, located at 200 Harris Ave, Needham, MA 02492, including the payment of all costs incidental or related thereto, and for which Town may be eligible for a grant from the Massachusetts School Building Authority ("MSBA"), said amount to be expended under the direction of the Permanent Public Building Committee and the Town Manager, and to meet this appropriation that said sum be transferred from Free Cash. The Town acknowledges that the MSBA's grant program is a non-entitlement, discretionary program based on need, as determined by the MSBA, and any costs the Town incurs in excess of any grant approved by and received from the MSBA shall be the sole responsibility of the Town; or take any other action relative thereto.

INSERTED BY: Select Board

FINANCE COMMITTEE RECOMMENDS THAT:

<u>Article Information</u>: This funding would provide for a feasibility study of renovation of the Pollard Middle School. The Town has been invited to participate in the eligibility phase of the Massachusetts School

Building Authority process. Feasibility includes funding for OPM, designer, survey, initial geotechnical analysis, wetlands, hazardous materials and traffic study costs. This project assumes that the Pollard would be constructed in partnership with the Massachusetts School Building Authority (MSBA), at a potential reimbursement rate of 20-22% of total project costs. The Pollard School project has been the subject of the School Committee's master planning process for many years.

ARTICLE 27: APPROPRIATE FOR ATHLETIC FACILITY IMPROVEMENTS – CLAXTON FIELD

To see if the Town will vote to raise and/or transfer and appropriate the sum of \$3,600,000 for the Claxton Field renovation project, to be spent under the direction of the Town Manager, and to meet this appropriation that the Treasurer, with the approval of the Select Board, is authorized to borrow said sum under Massachusetts General Law Chapter 44, Section 7; or take any other action relative thereto.

INSERTED BY: Select Board

FINANCE COMMITTEE RECOMMENDS THAT:

Article Information: This request is for the construction phase of the Claxton Field Renovation project, Funding for the design phase was granted for FY2021. The project includes conversion of the metal halide lighting on most of the existing poles to energy-efficient LED lights, and cutting and capping the older poles in the middle of the field, which present safety issues. The project will also include removing the existing skin clay material and evaluating the conditions below the skin, after which a new engineered material will be installed and laser graded, and the clay skins will be replaced. After further guidance from MassDEP, a more comprehensive geotextile fabric system was added to act as a barrier between the entire field subsurface and playing surface (previously this was limited to the ballfield areas and not as deep) as well as an additional six inches of loam depth. Other new features added during design include an irrigation system, an accessible looped pathway as a passive recreation enhancement, native tree, wildflower, and pollinator garden plantings, covered dugouts, spectator seating, fencing, warm up areas, and replacement bases and other equipment.

ARTICLE 28: APPROPRIATE FOR FIRE ENGINE

To see if the Town will vote to raise and/or transfer and appropriate the sum of \$1,275,000 for the purchase of a new fire engine, to be spent under the direction of the Town Manager, and to meet this appropriation that the Treasurer, with the approval of the Select Board, is authorized to borrow said sum under Massachusetts General Law Chapter 44, Section 7; or take any other action relative thereto.

INSERTED BY: Select Board

FINANCE COMMITTEE RECOMMENDS THAT:

<u>Article Information</u>: This funding would provide for the purchase of a new fire engine for the Fire Department. The new engine would replace Unit E-04, a 2005 model. The new engine would provide increased reliability, safety, and operational capabilities.

APPROPRIATE FOR WATER FLEET REFURBISHMENT **ARTICLE 29:**

To see if the Town will vote to raise and/or transfer and appropriate the sum of \$75,000 for Fleet refurbishment, to be spent under the direction of the Town Manager, and to meet this appropriation that \$75,000 be transferred from Water Enterprise Fund Retained Earnings; or take any other action relative thereto.

INSERTED BY: Select Board

FINANCE COMMITTEE RECOMMENDS THAT:

Article Information: The goal of this program is to extend the life cycle of vehicles, increase operational safety, and eventually reduce reactive maintenance. This is a recurring request, based on need.

APPROPRIATE FOR QUIET ZONE PROJECT ARTICLE 30:

To see if the Town will vote to raise and/or transfer and appropriate the sum of \$1,340,000 for the Quiet Zone design and construction project, including the payment of costs incidental or related thereto, to be spent under the direction of the Town Manager, to meet this appropriation that said sum be transferred from Free Cash; or take any other action relative thereto.

INSERTED BY: Select Board

FINANCE COMMITTEE RECOMMENDS THAT:

Article Information:

APPROPRIATE FOR PUBLIC WORKS INFRASTRUCTURE **ARTICLE 31:**

To see if the Town will vote to raise and/or transfer and appropriate the sum of \$475,000 for the Public Works Infrastructure Program, to be spent under the direction of the Town Manager, and to meet this appropriation that said sum be transferred from Free Cash; or take any other action relative thereto.

INSERTED BY: Select Board

FINANCE COMMITTEE RECOMMENDS THAT:

Article Information: This request is for the Public Works Infrastructure Program which allows the Department of Public Works to make improvements and repairs to Town infrastructure, including but not limited to roads, bridges, sidewalks, intersections, drains, brooks, and culverts.

Street Resurfacing

The Town aims to resurface 17 lane miles (or 120,000 square yards) per year, either through traditional milling and paving, micro surfacing, or rubber chip seal surface treatments, as appropriate. The cost per lane mile for resurfacing in FY24 is \$128,000 or more per lane mile. A basic overlay at 1.5 inches with asphalt berm curb and casting adjustments is \$105,000 per lane mile. The cost of micro surfacing treatments and rubber chip seal surfacing treatments are approximately \$6.13 per square yard. The street resurfacing program will be funded by other available sources..

Sidewalk Program

FY2024 contract pricing to reconstruct one mile of asphalt sidewalk with incidental costs is estimated to be \$451,440 per mile (\$85.50/lf). Contract pricing to install a mile of granite curb with minor drainage improvements and incidental costs is estimated to be \$485,760 per mile (\$92.00/lf). These costs do not include engineering, design, tree removal and replacement, major drainage improvements, or major public or private property adjustments. The sidewalk program will be funded by other available sources.

Intersection Improvements

This request is for improvements at the Hunnewell Street at Central Avenue intersection. There have been traffic flow concerns along Central Avenue, including at the intersection at Hunnewell Street. The traffic signal system at this intersection is outdated and beyond its useful life. This project would include a replacement/improvement of the traffic signal system. The new traffic signal system would feature modern technology better able to control the flow of traffic through the intersection, reducing traffic back-ups. The signals would be located in a way that leaves space for further improvements to the overall layout of the intersection to comply with Complete Streets principles. This project would be part of a larger traffic improvement plan along Central Avenue.

The intersection improvement program will be funded by other available sources.

Stormwater Plan

The request is to fund a Stormwater Plan that would evaluate the capacity and the condition of the existing Townwide stormwater drainage system. The plan would identify, prioritize, and address the health and safety, regulatory, and capacity concerns associated with the management of stormwater. It would also provide estimates for the financial investments that would be required for the construction and maintenance of future storm drain improvement projects to be funded out of the infrastructure article, including storage areas for discharge (e.g. retention ponds, underground vaults, dry wells). The Stormwater Plan would be closely tied to the ongoing master planning of the Town's brooks and culverts, which function as another important component of the stormwater network capacity by controlling the flow of surging water during heavy rains/storms. Destructive flooding in the summer of 2023 continued a pattern of increasingly erratic weather that is expected to worsen over time, further illustrating the need to continuously maintain and improve stormwater management infrastructure through holistic planning. It is difficult to ensure that the DPW is targeting projects that will have the maximum impact without a comprehensive plan to inform the Town's stormwater strategy.

In addition to the capacity and resiliency considerations, the Stormwater Plan would allow the Town to identify ways to improve surface water quality by mitigating pollutants through the stormwater drainage system. This portion of the Stormwater Capacity Plan would assist the DPW in their efforts to comply with standards set by the National Pollutant Discharge Elimination System (NPDES) permit. Target funding for the Stormwater Plan in FY2025 is \$250,000.

Brooks and Culverts

This request is for the design phase of the project. Funding for the construction phase will be requested for FY2027. Alder Brook is considered a category 5 impaired water body under NDPES. Category 5 is the worst rating a water body can receive from the EPA. An engineering consultant will be brought in to design a project to remove sediment and vegetation from the brook as well as repair/replace failing walls/culverts. The design will be focused on effectively cleaning the brook to remove the phosphorus contaminated sediment and improve the overall water quality. The section of the brook being addressed is from Webster Street at Dedham Avenue to the Charles River. Target funding for Brooks and Culverts improvements for FY2025 is \$225,000.

ARTICLE 32: APPROPRIATE FOR PUBLIC WORKS FACILITIES IMPROVEMENTS PHASE 1 DESIGN

To see if the Town will vote to raise and/or transfer and appropriate the sum of \$2,300,000 for the Public Works Facilities Improvements project, to be spent under the direction of the Town Manager, and to meet this appropriation that \$219,600 be transferred from Article 47 of the 2017 Annual Town Meeting, \$21,820 be transferred from Article 36 of the 2018 Annual Town Meeting, \$176,280 be transferred from Article 39 of the 2018 Annual Town Meeting \$32,600 be transferred from Article 37 of the 2019 Annual Town Meeting, \$249,700 be transferred from Article 21 of the 2020 Annual Town Meeting, and that the Treasurer, with the approval of the Select Board, is authorized to borrow \$1,600,000 under Massachusetts General Law Chapter 44, Section 7; or take any other action relative thereto.

INSERTED BY: Select Board

FINANCE COMMITTEE RECOMMENDS THAT:

Article Information: This funding would provide for Phase One design of the DPW Facilities Improvement. Phase One is to construct a new fleet maintenance facility as an expansion of the Jack Cogswell Building that will house the Fleet Division, including fleet storage and the equipment and facilities needed for their daily operations. Funding for the construction phase of this project is planned for fall 2026.

ARTICLE 33: APPROPRIATE FOR SEWER MAIN REPLACEMENT

To see if the Town will vote to raise and/or transfer and appropriate the sum of \$13,600,000 for sewer main replacement and rehabilitation, including costs incidental or related thereto, to be spent under the direction of the Town Manager, including without limitation all costs thereof as defined in Section 1 of Massachusetts General Law Chapter 29C, that to meet this appropriation that \$194,597 be transferred from Article 41 of the 2014 Annual Town Meeting, \$7,486 be transferred from Article 48 of the 2017 Annual Town Meeting, \$42,451 be transferred from Article 40 of the 2019 Annual Town Meeting, \$1,355,466 be transferred from Sewer Enterprise Retained Earnings, and that the Treasurer, with the approval of the Select Board, is authorized to borrow \$12,000,000 under Massachusetts General Law Chapter 44, Section 7, Massachusetts General Law Chapter 29C or any other enabling authority; that the Treasurer, with the approval of the Select Board, is authorized to borrow all or a portion of the amount from the Massachusetts Clean Water Trust (MCWT) established pursuant to Massachusetts General Law Chapter 29C and/or the Massachusetts Water Resources Authority (MWRA) and in connection therewith, to enter into a financing agreement and/or security agreement with the MCWT and/or loan agreement and financial assistance agreement with the MWRA with respect to such loan; that the Town Manager be authorized to contract with the MCWT, the MWRA and the Department of Environmental Protection with respect to such loan and for any federal, state or other aid available for the project or for the financing thereof; that the Select Board, Town Manager, or other appropriate local official is authorized to enter into a project regulatory agreement with the Department of Environmental Protection; and that the Town Manager is authorized to expend all funds available for the project; or take any other action relative thereto.

INSERTED BY: Select Board

FINANCE COMMITTEE RECOMMENDS THAT:

<u>Article Information</u>: This funding would provide for the second construction phase of the Interceptor Phase 2 project. The funding for the design phase was approved in FY2023, and the first construction phase was funded through the American Recovery Plan Act (ARPA). The Town is actively working on identifying and applying for funding from other grants and external funding sources from state agencies such as the MWRA and MassDEP (SRF loan program). The second phase involves the replacement of a section of the sewer

interceptor under the MBTA tracks, as well as additional lining south of the tracks. The existing interceptor is struggling to handle the sewer flow, so it is necessary to replace part of this segment with larger piping to increase its capacity while lining the rest to prevent collapse and infiltration. The limits of work for the second construction phase are from Kenney Street to Valley Road at Norwich Road (replacement of 2,900 linear feet) and from Valley Road at Norwich Road to the MWRA sewer siphon (lining of 3,400 linear feet).

ARTICLE 34: APPROPRIATE FOR WATER ENTERPRISE FUND CASH CAPITAL

To see if the Town will vote to raise and/or transfer and appropriate the sum of \$180,814 for Water Enterprise Fund Cash Capital, to be spent under the direction of the Town Manager, and to meet this appropriation that said sum be transferred from Water Enterprise Fund Retained Earnings; or take any other action relative thereto.

INSERTED BY: Select Board

FINANCE COMMITTEE RECOMMENDS THAT:

Article Information:

Unit	Existing	Division	Year	Replacement	Amount
151T	Ingersoll Rand	DPW Water	2008	Spcialty Trailer	\$31,323
157T	PP&P Portable Pump Trailer	DPW Water	2012	Specialty Trailer	\$81,991
	Mini- Excavator	DPW Water			\$67,500

ARTICLE 35: APPROPRIATE FOR WATER SERVICE CONNECTIONS

To see if the Town will vote to raise and/or transfer and appropriate the sum of \$1,000,000 for water service connections, to be spent under the direction of the Town Manager, and to meet this appropriation that \$207,466 be transferred from Article 46 of the 2013 Annual Town Meeting, \$49,037 be transferred from Article 42 of the 2014 Town Meeting, \$140,994 be transferred from Article 46 of the 2015 Annual Town Meeting, \$15,364 be transferred from Article 47 of the 2015 Annual Town Meeting, \$24,584 be transferred from Article 48 of the 2016 Annual Town Meeting, \$9,320 be transferred from Article 39 of the 2018 Annual Town Meeting, and that \$553,235 be transferred from Water Enterprise Fund Retained Earnings; or take any other action relative thereto.

INSERTED BY: Select Board

FINANCE COMMITTEE RECOMMENDS THAT:

<u>Article Information</u>: This funding would provide for the development of a plan to document and identify all known and unknown water service pipe materials and their locations, confirm the unknown services through test pit excavation, and remove old lead or plastic service connections wherever they exist, replacing them with new copper service piping. Services identified for replacement could range from supply mains into residential homes just prior to the water meters.

ARTICLE 36: RESCIND DEBT AUTHORIZATIONS

To see if the Town will vote to rescind the authorization to borrow, which was approved at a prior Town Meeting, where the purpose of the borrowing is no longer required nor necessary:

Project	Town Meeting	Article	Authorized	Rescind
Appropriate for Propert	October 24, 2022 Special	11	\$2,500,000	\$2,500,000
Acquisition	Town Meeting			

INSERTED BY: Select Board

FINANCE COMMITTEE RECOMMENDS THAT:

Article Information:

GENERAL ARTICLES, CITIZENS PETITIONS, & COMMITTEE ARTICLES

ARTICLE 37: ACCEPT M.G.L. CH. 32 SECTION 20(6)(A)/RETIREMENT BOARD STIPENDS

To see if the Town will vote to accept the provisions of M.G.L. Ch. 32 Section 20(6)(a) to provide a stipend of \$3,000 per year to the members of the Needham Contributory Retirement Board; or take any other action relative thereto.

INSERTED BY: Retirement Board

FINANCE COMMITTEE RECOMMENDS THAT:

Article Information:

ARTICLE 38: AMEND GENERAL BY-LAWS – PERIODIC GENERAL BY-LAW REVIEW

To see if the Town will vote to amend the General By-Laws by inserting a new Section 1.16 as follows:

SECTION 1.16 PERIODIC GENERAL BY-LAW REVIEW

- 1.16.1 In each year ending in a 5, a General By-Law Review Committee consisting of 7 members shall be established to review the General By-Laws and make a report, with any recommendations, to Town Meeting concerning any proposed amendments that the Committee may determine to be necessary or desirable, consistent with Section 1.16.3, below.
- 1.16.2 Each Committee established in accordance with Section 1.16.1 shall consist of: One (1) member or designee of the Select Board, one (1) member or designee of the School Committee, one (1) member or designee of the Planning Board, one (1) member or designee of the Finance Committee, the Town Moderator or designee, the Town Clerk and one Town Meeting Member appointed jointly by the remaining six (6) members. Members of the General By-Law Committee should have experience in Town government and Town Meeting and, except in the case of the Moderator, any

- designees appointed to the Committee shall be former members of the applicable board or committee.
- 1.16.3 The Committee shall conduct a holistic review of the By-Laws, with a particular emphasis on ensuring that the By-Laws remain current, clear, and well organized, without serving as a forum for advancing policy within the jurisdiction of another Town board, committee or commission.
- 1.16.4 The Committee shall set its own work plan, which shall commence in January of each year ending in a 5, and shall provide for the Committee to make any recommendations to the Annual Town Meeting in the spring of the following year, or to any Town Meeting that occurs sooner.
- 1.16.5 The Committee shall have the power to create subcommittees, which shall be public bodies in accordance with the Open Meeting Law.
- 1.16.6 The Committee will consult with Town staff and any board, committee or commission having jurisdiction over any particular by-law under review.
- 1.16.7 Each Committee established in accordance with Section 1.16.1 shall automatically dissolve, by operation of law, thirty (30) days after the conclusion of the Town Meeting at which it presents any recommendations, unless the Town Meeting has referred a proposed By-Law amendment back to the Committee for further consideration.

Or take any other action relative thereto.

INSERTED BY: Select Board

FINANCE COMMITTEE RECOMMENDS THAT:

Article Information:

ARTICLE 39: AMEND GENERAL BY-LAW - NON-CRIMINAL DISPOSITION/ PLASTIC BAGS

To see if the Town will vote to amend the General By-Laws as follows:

- 1. By deleting Section 3.12.4 (Penalties and Enforcement.) in its entirety and renumbering the remaining section in Section 3.12 in appropriate numerical order to account for said deletion.
- 2. To amend Section 8.2.2 (Non-Criminal Disposition) by inserting a new row in the table, immediately following the existing row for Section 3.11 to read as follows:

3.12	Plastic Bags	\$100	Per Offense	Director of Health
	_			of Health and
				Human Services or
				Designee

or take any other action relative thereto.

INSERTED BY: Select Board

FINANCE COMMITTEE RECOMMENDS THAT:

Article Information: The October 2023 Special Town Meeting voted to amend the General By-Laws to standardize placement of penalties and enforcement entities for non-criminal dispositions in a distinct section of the By-Laws (Section 8) and remove such references from the text of other By-Law sections. At the time of this amendment, the Plastic Bag By-Law, as adopted by the 2023 Annual Town Meeting, was not included in this realignment. This article seeks to rectify this omission.

ARTICLE 40: AMEND GENERAL BY-LAW TECHNOLOGY ADVISORY BOARD

To see if the Town will vote to amend the General By-Laws by deleting section 2.2.6 in its entirety and inserting in place thereof the following:

2.2.6. **Technology Advisory Board**

- (a) There shall be a Technology Advisory Board (hereinafter called the Board) consisting of five (5) regular members and three (3) ex officio members. The ex officio members shall be non-voting members.
- (b) The regular members of the Board shall be appointed by the Select Board to staggered three-year terms. The regular members of the Board shall be residents of the Town who have knowledge and experience in telecommunications or information technology. No employee of the Town shall be a regular member of the Board.
- (c) The ex officio members of the Board shall be:
 - (i) the Deputy Town Manager/Director of Finance
 - (ii) the Assistant Superintendent for Financial Operations, or a substitute designated by the Superintendent of Schools,
 - (iii) the School Department's Director of Technology, or a substitute designated by the Superintendent of Schools.
- (d) The role of the Board shall be (1) to provide technical assistance to all Town departments and the School Department in the formulation of technology plans and capital requests for voice, data and video systems; (2) to advise the Town Manager in the review of capital requests for voice, data and video systems, taking into consideration the goals of maximizing efficiency and cost effectiveness, minimizing unnecessary redundancy, and insuring, to the extent possible, the compatibility of each request with other existing or proposed systems; (3) to advise the Permanent Public Building Committee on the specifications to be considered for voice, data and video systems when constructing or renovating Town Facilities; (4) advise the Town Manager, Town Select Board, and Town Departments on matters relating to information technology policy, specifically with reference to issues of security, privacy, future technology and possible provision of government services through information technology; and (5) the advice will be delivered through a vote of the regular members and reported to the Town Manager, Town Select Board, and the Town Departments which requested the advice.
- (e) The Board shall, annually in June, elect from among its regular members a chair and vice-chair, each of whom shall serve until a successor is duly elected. The chair shall annually appoint a member to serve as secretary.

or take any other action relative thereto.

INSERTED BY: Select Board

FINANCE COMMITTEE RECOMMENDS THAT:

Article Information:

ARTICLE 41: AUTHORIZE SELECT BOARD TO REMOVE RESTRICTIONS

To see if the Town will vote to amend its prior votes under Article 5 of the October 21, 1957 Special Town Meeting; Article 21 of the November 14, 1960 Special Town Meeting; and Articles 51 and 52 of the March 20, 1967 Annual Town Meeting to remove the restriction that property conveyed to the Needham Housing Authority be limited to use as housing for the elderly, and to otherwise leave said votes unamended and in full force and effect and, further, to authorize the Select Board to execute and record any instrument or instruments necessary to eliminate restrictions of record in the title to the property conveyed to the Needham Housing Authority under authority of said votes, including without limitation in the deed to the Needham Housing Authority dated October 29, 1957, and recorded with the Norfolk County Registry of Deeds in Book 3600, Page 519; the deed to the Needham Housing Authority dated December 20, 1960, and recorded in Book 3871, Page 27; and the deed to the Needham Housing Authority dated May 9, 1967, and recorded in Book 4426, Page 484; or take any other action relative thereto.

INSERTED BY: Select Board

FINANCE COMMITTEE RECOMMENDS THAT:

Article Information:

ARTICLE 42: AMEND GENERAL BY-LAWS — LOCAL HISTORIC DISTRICT

To see if the Town will vote to amend the General By-Laws as follows:

1. By adding new Section 2.12, to read as follows:

SECTION 2.12 Local Historic District and Historic District Commission

- **2.12.1** There is hereby established a Local Historic District, and a Historic District Commission which shall administer the district as provided for under Massachusetts General Laws Chapter 40C, as amended, and this By-law.
- **2.12.2 Purpose.** The purpose of this By-law is to aid in the preservation and protection of the distinctive characteristics and architecture of buildings and places significant in the history of the Town of Needham, the maintenance and improvement of their settings and the encouragement of new building designs compatible with the existing architecture.
- **2.12.2 Definitions.** As used in this By-law the following terms shall have the following meaning:

Alteration/To Alter

The act or the fact of rebuilding, reconstruction, restoration, replication, removal, demolition, and other similar activities.

Building

A combination of materials forming a shelter for persons, animals or property.

Certificate

A Certificate of Appropriateness, a Certificate of Non-Applicability, or a Certificate of Hardship as set forth in this By-law.

Commission

The Historic District Commission as established in this By-law.

Construction/To Construct

The act or the fact of building, erecting. installing, enlarging, moving and other similar activities.

Display Area

The total surface area of a sign, including all lettering, wording, designs, symbols, background and frame, but not including any support structure or bracing incidental to the sign. The display area of an individual letter sign or irregular shaped sign shall be the area of the smallest rectangle into which the letters or shape will fit. Where sign faces are placed back to back and face in opposite directions, the display area shall be defined as the area of one face of the sign.

District

The Local Historic District as established in this By-law consisting of one or more district areas.

Exterior Architectural Feature

Such portion of the exterior of a building or structure as is open to view from a public way or ways, including but not limited to architectural style and general arrangement and setting thereof, the kind and texture of exterior building materials, and the type and style of windows, doors, lights, signs, and other appurtenant exterior fixtures.

Person Aggrieved

The applicant; an owner of adjoining property; an owner of property within the same district area; an owner of property within 100 feet of said district area; and any charitable corporation in which one of its purposes is the preservation of historic places,

structures, buildings, or districts.

Signs

Any symbol, design or device used to identify or advertise any place of business, product, activity, or person.

Structure

A combination of materials other than a building, including but not limited to a sign, fence, wall, terrace, walk, or driveway.

Temporary Structure or Building

A building not to be in existence for a period of more than two years. A structure not to be in existence for a period of more than one year. The commission may further limit the time periods set forth herein as it deems appropriate.

2.12.3 District. The Local Historic District shall consist of one or more district areas as listed in Section 2.12.13 (Appendices) of this By-law.

2.12.4 Commission.

- **2.12.4.1** The district shall be overseen by the commission, which shall consist of between five to seven members to be appointed by the Select Board. one member initially to be appointed for one year, two for two years, and two for three years, and each successive appointment to be made for three years.
- **2.12.4.2** The commission shall include, if possible, one member from two nominees solicited from the Needham History Center and Museum, one member from two nominees solicited from the chapter of the American Institute of Architects covering Needham; one member from two nominees of the Greater Boston Association of Realtors covering Needham; and one property owner from within at least one of the district areas.

If within thirty days after submission of a written request for nominees to any of the organizations herein named insufficient nominations have been made, the Select Board may proceed to make appointments as it desires.

- **2.12.4.3** The Select Board may appoint up to four alternate members to the commission. An alternate member shall act and vote in the place of a regular member should such regular member be absent from a meeting or be unwilling or unable to act or vote, as designated by the Chair. Said alternate members shall initially be appointed for terms of two or three years, and for three-year terms thereafter.
- **2.12.4.4** Each member and alternate member shall continue to serve in office after the expiration date of his or her term until a successor is duly appointed.
- **2.12.4.5** Meetings of the commission shall be held at the call of the chair, at the request of two members and in such other manner as the commission shall determine in its Rules and Regulations.
- **2.12.4.6** A majority of the appointed membership of the commission (exclusive of those seats provided for alternate members) shall constitute a quorum.

2.12.5 Commission Powers and Duties

- **2.12.5.1** The commission shall exercise its powers in administering and regulating the construction and alteration of any structures or buildings within its jurisdiction in the district as set forth under the procedures and criteria established in this by-law. In exercising its powers and duties hereunder, the commission shall pay due regard to the distinctive characteristics of each building, structure and district area.
- **2.12.5.2** The commission may adopt, and from time to time amend, reasonable Rules and Regulations not inconsistent with the provisions of this By-law or M.G.L. Chapter 40C, setting forth such forms and procedures as it deems desirable and necessary for the regulation of its affairs and the conduct of its business, including requirements for the contents and form of applications for certificates, fees, hearing procedures and other matters. The commission shall file a copy of any such Rules and Regulations with the office of the Town Clerk.
- **2.12.5.3** The commission, after a public hearing duly posted and advertised at least 14 days in advance, may adopt and from time to time amend guidelines which set forth the designs for certain exterior

architectural features which are, in general, suitable for the issuance of a certificate. No such design guidelines shall limit the right of an applicant for a certificate to present other designs to the commission for approval.

- **2.12.5.4** The commission shall at the beginning of each fiscal year hold an organizational meeting and elect a Chair, a Vice Chair, and Clerk, and file notice of such election with the office of the Town Clerk.
- **2.12.5.5**The commission shall keep a permanent record of its resolutions, transactions, decisions and determinations and of the vote of each member participating therein.
- **2.12.5.6** The commission shall undertake educational efforts to explain to the public and property owners the merits and functions of a district.

2.12.6 Alterations and Construction Prohibited Without a Certificate

- **2.12.6.1** Except as this by-law provides, no building or structure or part thereof within a district shall be constructed or altered in any way that affects the exterior architectural features, unless the commission shall first have issued a certificate with respect to such construction or alteration.
- **2.12.6.2** No building permit for construction of a building or structure or for alteration of an exterior architectural feature within a district and no demolition permit for demolition or removal of a building or structure within a district shall be issued by the town or any department thereof until a certificate as required under this by-law has been issued by the commission.

2.12.7 Procedures for Review of Applications

- 2.12.7.1 Any person who desires to obtain a certificate from the commission shall file with the commission an application for a certificate of appropriateness, of non-applicability or of hardship, as the case may be. The application shall be accompanied by such plans, elevations, specifications, material and other information, including in the case of demolition or removal a statement of the proposed condition and appearance of the property thereafter, as may be reasonably deemed necessary by the commission to enable it to make a determination on the application.
- **2.12.7.2** The commission shall determine within fourteen (14) days of the filing of an application for a certificate whether said application involves any exterior architectural features which are within the jurisdiction of the commission.
- **2.12.7.3** If the commission determines that an application for a certificate does not involve any exterior architectural features, or involves an exterior architectural feature which is not subject to review by the commission under the provisions of this By-law, the commission shall forthwith issue a certificate of Non-Applicability.
- 2.12.7.4 If the commission determines that such application involves any exterior architectural feature subject to review under this By-law, it shall hold a public hearing on the application, except as may otherwise be provided in this By-law. The commission shall hold such a public hearing within forty-five (45) days from the date of the filing of the application. At least fourteen (14) days before said public hearing, public notice shall be given. Such notice shall identify the time, place and purpose of the public hearing. Concurrently, a copy of said public notice shall be mailed to the applicant, to the owners of all adjoining properties and of other properties deemed by the commission to be materially affected thereby, all as they appear on the most recent applicable tax list, to the Planning Board, to any person filing a written request

for notice of hearings, such request to be renewed yearly in December, and to such other persons as the commission shall deem entitled to notice.

- **2.12.7.4.a** A public hearing on an application for a certificate need not be held if such hearing is waived in writing by all persons entitled to notice thereof. In addition, a public hearing on an application for a certificate may be waived by the commission if the commission determines that the exterior architectural feature involved, or its category, is so insubstantial in its effect on the district that it may be reviewed by the commission without a public hearing. If the commission dispenses with a public hearing on an application for a certificate, notice of such application shall be given to the owners of all adjoining property and of other property deemed by the commission to be materially affected thereby as above provided, and ten (10) days shall elapse after the mailing of such notice before the commission may act upon such application.
- 2.12.7.5 Within sixty (60) days after the filing of an application for a certificate, or within such further time as the applicant may allow in writing, the commission shall issue a certificate or a disapproval. In the case of a disapproval of an application for a certificate, the commission shall set forth in its disapproval the reasons for such disapproval. The commission may include in its disapproval specific recommendations for changes in the applicant's proposal with respect to the appropriateness of design, arrangement, texture, material and similar features which, if made and filed with the commission in a subsequent application, would make the application acceptable to the commission.
- **2.12.7.6** The concurring vote of a majority of the members shall be required to issue a certificate.
- **2.12.7.7** In issuing certificates, the commission may, as it deems appropriate, impose certain conditions and limitations, and may require architectural or plan modifications consistent with the intent and purpose of this By-law.
- **2.12.7.8** If the commission determines that the construction or alteration for which an application for a certificate of appropriateness has been filed will be appropriate for or compatible with the preservation or protection of the district, the commission shall issue a certificate of appropriateness.
- 2.12.7.9 If the construction or alteration for which an application for a certificate of appropriateness has been filed shall be determined to be inappropriate and therefore disapproved, or in the event of an application for a certificate of hardship, the commission shall determine whether, owing to conditions especially affecting the building or structure involved, but not affecting the district generally, failure to approve an application will involve a substantial hardship, financial or otherwise, to the applicant and whether such application may be approved without substantial detriment to the public welfare and without substantial derogation from the intent and purposes of this By-law. If the commission determines that owing to such conditions failure to approve an application will involve substantial hardship to the applicant and approval thereof may be made without such substantial detriment or derogation, the commission shall issue a certificate of hardship.
- **2.12.7.10** The commission shall send a copy of its certificates and disapprovals to the applicant and shall file a copy of its certificates and disapprovals with the office of the Town Clerk and the Building Commissioner. The date of issuance of a certificate or disapproval shall be the date of the filing of a copy of such certificate or disapproval with the office of the Town Clerk.
- **2.12.7.11** If the commission should fail to issue a certificate or a disapproval within sixty (60) days of the filing of the application for a certificate, or within such further time as the applicant may allow in writing, the commission shall thereupon issue a certificate of Hardship Due to Failure to Act.

- **2.12.7.12** Each certificate issued by the commission shall be dated and signed by its chair or such other person designated by the commission to sign such certificates on its behalf.
- 2.12.7.13 A person aggrieved by a determination of the commission may, within twenty (20) days of the issuance of a certificate or disapproval, file a written request with the commission for a review by a person or persons of competence and experience in such matters, acting as arbitrator and designated by the Metropolitan Area Planning Council. The finding of the person or persons making such review shall be filed with the Town Clerk within forty-five (45) days after the request, and shall be binding on the applicant and the commission, unless a further appeal is sought in the Superior Court as provided in Chapter 4OC, Section 12A. The filing of such further appeal shall occur within twenty (20) days after the finding of the arbitrator has been filed with the office of the Town Clerk.

2.12.8 Criteria for Determinations

- **2.12.8.1** In deliberating on applications for certificates, the commission shall consider, among other things, the historic and architectural value and significance of the site, building or structure; the general design, proportions, detailing, mass, arrangement, texture, and material of the exterior architectural features involved; and the relation of such exterior architectural features to similar features of buildings and structures in the surrounding area.
- **2.12.8.2** In the case of new construction or additions to existing buildings or structures, the commission shall consider the appropriateness of the scale, shape and proportions of the building or structure both in relation to the land area upon which the building or structure is situated and in relation to buildings and structures in the vicinity. The commission may in appropriate cases impose dimensional and setback requirements in addition to those required by applicable statute or by-law.
- **2.12.8.3** When ruling on applications for certificates on solar energy systems as defined in Section IA of Chapter 40A, the commission shall consider the policy of the Commonwealth of Massachusetts to encourage the use of solar energy systems and to protect solar access.
- **2.12.8.4** The commission shall not consider interior arrangements or architectural features not subject to public view from a public way.

2.12.9 Exclusions

- **2.12.9.1** The commission shall exclude from its purview the following:
- 1) Temporary buildings, structures or signs subject, however, to conditions pertaining to the duration of existence and use, location, lighting, removal and similar matters as the commission may reasonably specify.
- 2) Terraces, walks, driveways, sidewalks and similar structures, provided that any such structure is substantially at grade level.
- 3) Storm windows and doors, screen windows and doors, and window air conditioners.
- 4) The color of paint.
- 5) The color of materials used on roofs.

- Signs of not more than two (2) square feet in display area in-connection with use of a residence for a customary home occupation or for professional purposes, provided only one such sign is displayed in connection with each residence and if illuminated is illuminated only indirectly; and one sign in connection with the nonresidential use of each building or structure which is not more than six (6) square feet in display area, consists of letters painted on wood without symbol or trademark and if illuminated is illuminated indirectly.
- 7) The reconstruction, substantially similar in exterior design, of a building, structure or exterior architectural feature damaged or destroyed by fire, storm or other disaster, provided such reconstruction is begun within one year thereafter and carried forward with due diligence.
- **2.12.9.2** Upon request the commission shall issue a certificate of Non-Applicability with respect to construction or alteration in any category not subject to review by the commission in accordance with the above provisions.
- 2.12.9.3 Nothing in this By-law shall be construed to prevent the ordinary maintenance, repair or replacement of any exterior architectural feature within a district which does not involve a change in design, material or the outward appearance thereof, nor to prevent landscaping with plants, trees or shrubs, nor construed to prevent the meeting of requirements certified by a duly authorized public officer to be necessary for public safety because of an unsafe or dangerous condition, nor construed to prevent any construction or alteration under a permit duly issued prior to the effective date of this By-law.
- **2.12.10 Categorical Approval.** The commission may determine from time to time after a public hearing, duly advertised and posted at least fourteen (14) days in advance in a conspicuous place in Town Hall and in a newspaper of general circulation in Needham, that certain categories of exterior architectural features, structures or buildings under certain conditions may be constructed or altered without review by the commission without causing substantial derogation from the intent and purpose of this By-law.

2.12.11 Enforcement and Penalties.

- **2.12.11.1** The commission shall determine whether a particular activity is in violation of this By-law or not.
- **2.12.11.2** The commission, upon a written complaint of any resident of Needham, or owner of property within Needham, or upon its own initiative, may seek to institute via appropriate action by the enforcement entity any appropriate action or proceedings in the name of the Town of Needham to prevent, correct, restrain, or abate violation of this By-law. In the case where the commission is requested in writing to enforce this By-law against any person allegedly in violation of same and the commission declines to act, the commission shall notify, in writing, the party requesting such enforcement of any action or refusal to act and the reasons therefore, within twenty-one (21) days of receipt of such request.
- **2.12.11.3** Whoever violates any of the provisions of this By-law shall be punishable by a noncriminal disposition fine for each offense. Each day during any portion of which such violation continues to exist shall constitute a separate offense.

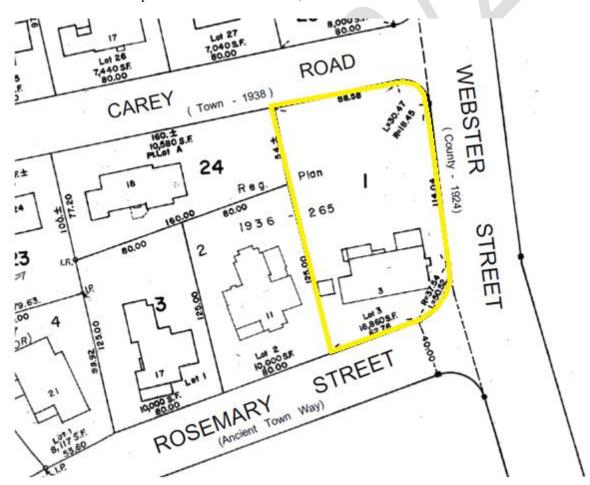
2.12.12 Validity and Separability. The provisions of this By-law shall be deemed to be separable. If any of its provisions, sections, subsections, sentences or clauses shall be held to be invalid or unconstitutional by any court of competent jurisdiction, the remainder of this By-law shall continue to be in full force and effect.

2.12.13 Appendices.

Appendix 1: Jonathan Kingsbury House Local Historic District

The Jonathan Kingsbury House Local Historic District shall be a district area under this By-law. The location and boundaries of the Jonathan Kingsbury House Local Historic District are defined and shown on the Local Historic District Map of the Town of Needham, Sheet 1-2024 which is a part of this By-law. Sheet 1 is based on the 2023 Assessor's Map. The delineation of the district area boundaries is based on the parcel boundaries then in existence and shown therein, except as otherwise apparent on Sheet 1.

Local Historic District Map of the Town of Needham, Sheet 1-2024:



Recorded in the office of the Needham Town Clerk.

2. To amend Section 8.2.2 (Non-Criminal Disposition) by inserting a new row in the table, immediately following the existing row for Section 2.11.5, to read as follows:

2.12	Historic District	\$300	Per Day	Building
				Commissioner or
				Designee

or take any other action relative thereto.

INSERTED BY: Select Board

FINANCE COMMITTEE RECOMMENDS THAT:

Article Information:

CITIZENS' PETITION: RESCIND DEBT AUTHORIZATION **ARTICLE 43**:

To see if the Town will vote to rescind the authorization to borrow, which was approved at a prior Town Meeting, where the purpose of the borrowing is no longer required nor necessary:

Project	Town Meeting	Article	Authorized	Rescind
Appropriate for Property	October 2022 Fall Special	11	\$2,500,000	\$2,500,000
Acquisition (Castle Farm	Town Meeting			
Property owned by the				
Foster Estate)				

INSERTED BY: Joseph Abruzese

FINANCE COMMITTEE RECOMMENDS THAT:

Article Information:

ARTICLE 44: CITIZENS' PETITION/AMEND ZONING BY-LAW – DIMENSIONAL REGULATIONS

To see if the Town will vote to amend the Needham Zoning Bylaw by amending Chapter 4 Dimensional Regulations by:

Removing the following paragraph of section 4.2:

"The term "Floor Area Ratio" means the floor area divided by the lot area. Floor area shall be the sum of the horizontal areas of the several floors of each building on a lot, as measured from the exterior faces of the exterior walls, but excluding basements, attics, half-stories located directly above the second floor, unenclosed porches, and up to 600 square feet of floor area intended and designed for the parking of automobiles whether in accessory buildings or structures, or in main buildings or structures."

And in its place inserting the following paragraph:

"The term "Floor Area Ratio" means the floor area divided by the lot area. Floor area shall be the sum of the horizontal areas of the several floors of each building, including areas in basements, attics, and penthouses, as measured from the exterior faces of the walls, but excluding spaces where the interior

ceiling height is less than 5', unenclosed porches and balconies, and up to 600 square feet of floor area intended and designed for the parking of automobiles whether in accessory buildings or structures, or in main buildings or structures.";

or take any other action relative thereto.

INSERTED BY: Joseph Matthews
FINANCE COMMITTEE RECOMMENDS THAT:

Article Information:

ARTICLE 45: CITIZENS' PETITION – SINGLE USE PLASTICS BAN BY-LAW

To see if the Town will vote to amend the General By-laws by:

1. Adding a new Section 3.13 to read as follows:

SECTION 3.13 POLYSTYRENE PACKAGING MATERIAL, SINGLE-USE PLASTIC STRAWS, SINGLE-USE PLASTIC STIRRERS, PLASTIC SPLASH GUARDS, AND WATER BOTTLES

3.13.1 Definitions.

The following words shall, unless the context clearly requires otherwise, have the following meanings:

- a) "Department" means the Town of Needham Public Health Department.
- b) "Food or Beverage Vendor" means an operation that stores, prepares, packages, serves, vends, distributes, or otherwise provides food or beverages for human consumption, including but not limited to any establishment requiring a permit to operate in accordance with the Massachusetts Retail Food Code, 105 CMR 590, as it may be amended from time to time.
- c) "Health Agent" shall mean the Director of Health and Human Services or his/her designee.
- d) "Plastic" means a material that contains one or more organic polymer substances of large molecular weight as an essential ingredient.
- e) "Polystyrene" means any food, beverage, or other packaging materials made from a styrene monomer, including but not limited to
 - i) Expanded polystyrene (EPS), which is a thermoplastic petrochemical material utilizing a styrene monomer and processed by any number of techniques including, but not limited to, fusion of polymer spheres (expandable bead polystyrene), injection molding, form molding, and extrusion-blow molding (extruded foam polystyrene); or
 - ii) Clear or solid polystyrene, which is known as "oriented polystyrene."
- f) "Prepared food" means any food or beverages, which are served, packaged, cooked, chopped, sliced, mixed, brewed, frozen, squeezed or otherwise prepared on the premises where the food or

beverages are to be served. For the purposes of this bylaw, prepared food does not include raw, butchered meats, fish and/or poultry sold from a butcher case or similar retail appliance.

- g) "Retail Sales Establishment" shall mean any business facility that sells goods directly to the consumer whether for or not for profit in the Town of Needham including, but not limited to retail stores, restaurants, pharmacies, food or ice cream truck, convenience, grocery stores, supermarket, liquor stores, seasonal and temporary businesses.
- h) "Single-use plastic straw"
 - i) In general The term "single-use plastic straw" means a single-use, disposable tube made of plastic derived from either petroleum or a biologically based polymer, such as corn or other plant sources, used to transfer a beverage from a container to the mouth of the person drinking the beverage.
 - ii) Exception The term "single-use plastic straw" shall not include straws made from non-plastic materials, including, but not limited to metal, glass, paper, pasta, sugar cane, wood, or bamboo;
- i) "Single-use plastic stirrer" The term "single-use plastic stirrer" means a device that is used to mix beverages and designed as a single-use product made of plastic.
- j) "Single Use" means food and beverage serviceware, that is not reusable, as defined above, and are designed to be used once and then discarded, and not designed for repeated use and sanitizing.
- k) "Single-use plastic splash guard" means a device that fits into the sip-hole of a beverage container lid to prevent a beverage from splashing and is designed as a single-use product made of plastic.
- 1) "Single-use plastic water bottle" means any single serving container, whether sold individually or in bulk, containing non-carbonated, unflavored drinking water with a volume of one liter or less, that is made in whole or in part of plastic material, excluding the cap.
- m) "Styrofoam" is a Dow Chemical Co. trademarked form of extruded polystyrene and is commonly used to refer to foam polystyrene. These are generally used to make insulated cups, bowls, trays, clamshell containers, meat trays, foam packing materials and egg cartons. The products are sometimes identified by a #6 resin code.

3.13.2 Regulated Conduct.

3.13.2.1Polystyrene/Styrofoam Containers.

- a. Food establishments are prohibited from dispensing prepared food or beverages to any person in single use food containers made from foam polystyrene.
- b. Retail establishments are prohibited from selling or distributing single use food containers made from foam polystyrene to customers.
- **3.13.2.2Single Use Plastic Straws.** A food or beverage vendor shall not provide a single-use plastic straw to a customer, unless that customer verbally or electronically requests a plastic straw.
- **3.13.2.3Single-Use Plastic Stirrers.** A food or beverage vendor shall not provide a single-use plastic stirrer to a customer.
- **3.13.2.4Single-Use Plastic Splash Guards.** A food or beverage vendor shall not provide a single-use plastic splash guard to a customer.

3.13.2.5Single-Use Plastic Water Bottles. No retail establishment shall sell or otherwise provide to a consumer plastic water bottles containing 1 liter or less of non-carbonated, non-flavored water, except as may be required for safety, health, or emergency situations.

3.13.3 Effective Date.

Section 3.13.2.5 (Single-Use Plastic Water Bottles) shall take effect on January 1, 2026. All other provisions of this Section 3.13 shall take effect on January 1, 2025.

3.13.4 Regulations.

The Needham Public Health Department may adopt and amend rules and regulations to effectuate the purposes of this by-law.

3.13.5 Severability.

Each separate provision of this section shall be deemed independent of all other provisions herein, and if any provision of this section be declared to be invalid by the Attorney General or a court of competent jurisdiction, the remaining provisions of this section shall remain valid and enforceable.

2. Amending Section 8.2.2 (Non-Criminal Disposition) by inserting a new row in the table, in appropriate numerical order, to read as follows:

3.13	Polystyrene Packaging	\$100 - 1st Offense	Per Day	Director of Health
	Material, Single-Use	\$200 - 2nd		and Human Services
	Plastic Straws, Single-	Offense		or Designee
	Use Plastic Stirrers,	\$300 – each		
	Plastic Splash Guards,	subsequent		
	and Water Bottles			

or take any other action relative thereto.

INSERTED BY: Robert Fernandez

FINANCE COMMITTEE RECOMMENDS THAT:

Article Information:

ARTICLE 46: CITIZENS' PETITION – AUTHORIZATION TO EXPEND FUNDS FOR CONSULTANT FOR MBTA COMMUNITIES ZONING

This petition, in accordance with Section 1.8 of Needham's General By-Laws, now comes before the Town Meeting for the express "purpose of providing the [Town Meeting] voters of the town with factual information relative to measures to be voted upon at elections in the town." In this instance, the "measures to be voted upon" are related to current zoning proposals associated with the MBTA Communities Act.

This petition now seeks the appropriation and authorization in an amount not to exceed \$150,000 to prepare an analysis of Infrastructure, Public Safety, and Environmental Impacts associated with said MBTA Communities Act.

This appropriation shall be directed toward the hiring of a technical consultant with the expertise to perform an independent evaluation of the potential infrastructure, public safety, and environmental impacts caused by the changes in zoning that are currently proposed and recommended by the HONE Committee.

Scope of said evaluation would include a) data collection and from relevant town departments, b) integrated analysis of the data with current zoning proposals, c) evaluation of the Town's current capital infrastructure program and how it would be affected by HONE's current proposals, d) identify areas of convergence, divergence, and potential cost impacts within these various capital programs, e) identify potential 'red flags' regarding public safety and environmental impacts, and f) create a report of findings that would include visual imagery, such as 3-dimensional rendering of the proposed zoning plan(s) that would enable the lay public to better understand the current HONE proposal(s).

Said evaluation would take the form of a written report and would be produced and available for viewing by Town Meeting Members and the general citizenry at least thirty (30) days before any voting by any Town Meeting Members.

This report will address "factual information" and impacts to public safety; schools (student enrollment and capital projects); water, sewer, and drainage systems; traffic circulation; capital road projects; and to the extent possible, property valuations and potential property tax impacts.

INSERTED BY: Gary Ajamian FINANCE COMMITTEE RECOMMENDS THAT:

Article Information:

TOWN RESERVE ARTICLES

ARTICLE 47: APPROPRIATE TO ATHLETIC FACILITY IMPROVEMENT FUND

To see if the Town will vote to raise, and/or transfer and appropriate the sum of \$68,743 to the Athletic Facility Improvement Fund, as provided under the provisions of Massachusetts General Law Chapter 40, Section 5B, and to meet this appropriation that said sum be transferred from Free Cash; or take any other action relative thereto.

INSERTED BY: Select Board FINANCE COMMITTEE RECOMMENDS THAT:

Article Information: Massachusetts General Law Chapter 40, Section 5B, allows the Town to create one or more stabilization funds for different purposes. A stabilization fund is a special reserve fund into which monies may be appropriated and reserved for later appropriation for any lawful municipal purpose. Monies accumulated in a stabilization fund carry forward from one fiscal year to another. Interest earned from the investment of monies in the stabilization fund remains with that fund. Town Meeting by majority vote may appropriate into the fund and by a two-thirds vote appropriate from the fund. The 2012 Annual Town Meeting approved the creation of the Athletic Facility Improvement Fund to set aside capital funds for

renovation and reconstruction of the Town's athletic facilities and associated structures, particularly at Memorial Park and DeFazio Park. The balance in the fund as of December 29, 2023 was \$1,169,616.

ARTICLE 48: APPROPRIATE TO CAPITAL IMPROVEMENT FUND

To see if the Town will vote to raise, and/or transfer and appropriate a sum to the Capital Improvement Fund, as provided under the provisions of Massachusetts General Law Chapter 40, Section 5B, and to meet this appropriation that said sum be raised from the Tax Levy; or take any other action relative thereto.

INSERTED BY: Select Board

FINANCE COMMITTEE RECOMMENDS THAT:

Article Information: Massachusetts General Law Chapter 40, Section 5B, allows the Town to create one or more stabilization funds for different purposes. A stabilization fund is a special reserve fund into which monies may be appropriated and reserved for later appropriation for any lawful municipal purpose. Monies accumulated in a stabilization fund carry forward from one fiscal year to another. Interest earned from the investment of monies in the stabilization fund remains with that fund. The 2004 Annual Town Meeting under Article 58 approved the creation of Capital Improvement Stabilization Fund for the purpose of setting aside funds for time-sensitive and critical capital items at times when ordinary funding sources are limited or not available. Over time, as the fund grows and is supported, it will be one of the tools in the overall financial plan of the Town. Maintaining and supporting such funds is looked upon favorably by the credit rating industry. The balance in the fund as of December 29, 2023 was \$ 1,617,038.

ARTICLE 49: APPROPRIATE TO CAPITAL FACILITY FUND

To see if the Town will vote to raise, and/or transfer and appropriate a sum to the Capital Facility Fund, as provided under the provisions of Massachusetts General Law Chapter 40, Section 5B, and to meet this appropriation that said sum be raised from the Tax Levy; or take any other action relative thereto.

INSERTED BY: Select Board FINANCE COMMITTEE RECOMMENDS THAT:

Article Information: Massachusetts General Law Chapter 40, Section 5B, allows the Town to create one or more stabilization funds for different purposes. A stabilization fund is a special reserve fund into which monies may be appropriated and reserved for later appropriation for any lawful municipal purpose. Monies accumulated in a stabilization fund carry forward from one fiscal year to another. Interest earned from the investment of monies in the stabilization fund remains with that fund. Town Meeting by majority vote may appropriate into the fund and by a two-thirds vote appropriate from the fund. The 2007 Annual Town Meeting under Article 10 approved the creation of the Capital Facility Fund, as part of the Town's planning strategy for addressing capital facility maintenance needs by providing a reserve to address extraordinary building repairs and related expenses at times when other resources are unavailable. The purpose of this fund is to allow the Town, from time to time, by appropriation, to reserve funds for design, maintenance, renovation, or reconstruction relating to the structural integrity, building envelope, or MEP (mechanical, electrical, plumbing) systems of then-existing capital facilities. The balance in the fund as of December 29, 2023 was \$2,063,076.

ARTICLE 50: APPROPRIATE DEBT SERVICE STABILIZATION FUND

To see if the Town will vote to raise and/or transfer and appropriate a sum to the Debt Service Stabilization Fund as provided under the provisions of Massachusetts General Law Chapter 40, Section 5B, and to meet this appropriation that a sum be transferred from Free Cash and that said sum be raised from the tax levy; or take any other action relative thereto.

INSERTED BY: Select Board

FINANCE COMMITTEE RECOMMENDS THAT:

Article Information: Massachusetts General Law Chapter 40, Section 5B, allows the Town to create one or more stabilization funds for different purposes. A stabilization fund is a special reserve fund into which monies may be appropriated and reserved for later appropriation for any lawful municipal purpose. Monies accumulated in a stabilization fund carry forward from one fiscal year to another. Interest earned from the investment of monies in the stabilization fund remains with that fund. Town Meeting by majority vote may appropriate into the fund and by a two-thirds vote appropriate from the fund. The Debt Service Stabilization Fund (DSSF) was approved under Article 14 of the November 2, 2015 Special Town Meeting. The intent of this fund is to set aside funds to be available, when necessary, to pay certain debt obligations. This fund is intended to be part of the Town's overall planning strategy for addressing capital facility needs, particularly over the next five years. The fund provides added flexibility to maintain the Town's capital investment strategy by smoothing out the impact of debt payments in years when the debt level is higher than is typically recommended. The fund may also be beneficial at times when interest rates are higher than expected. The fund is designed to ensure that monies are not depleted in a single year, and that the amount available for appropriation is known before the budget year begins. The amount appropriated into the Fund will stay with the fund and will be used to manage the Town's reliance on debt. The balance in the fund as of December 29, 2023 was \$2,312,383.

ARTICLE 51: OMNIBUS

To see if the Town will vote to raise by taxation, transfer from available funds, by borrowing or otherwise, such sums as may be necessary for all or any of the purposes mentioned in the foregoing articles, especially to act upon all appropriations asked for or proposed by the Select Board, or any Town officer or committee, to appoint such committees as may be decided upon and to take action upon matters which may properly come before the meeting; or take any other action relative thereto.

INSERTED BY: Select Board

And you are hereby directed to serve this Warrant by posting copies thereof in not less than twenty public places in said Town at least fourteen (14) days before said meeting.

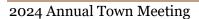
Hereof fail not and make due return of this warrant with your doings thereon unto our Town Clerk on or after said day and hour.

Given into our hands at Needham aforesaid this 13th day of February 2024.

Marianne B. Cooley, Chair Kevin Keane, Vice Chair Heidi Frail, Clerk Marcus A. Nelson, Member Catherine Dowd, Member

Select Board of Needham

A TRUE COPY Attest: Constable:





Select Board TOWN OF NEEDHAM AGENDA FACT SHEET

MEETING DATE: 2/27/2024

Agenda Item	May 13, 2024 Special Town Meeting Update
Presenter(s)	Kate Fitzpatrick, Town Manager

1. BRIEF DESCRIPTION OF TOPIC TO BE DISCUSSED

The Town Manager will update the Board on preparations for the May 13, 2024 Special Town Meeting. The Board is scheduled to call for the Special Town Meeting and open the warrant at its meeting on March 12, 2024.

2. VOTE REQUIRED BY SELECT BOARD

N/A - Discussion Only

3. BACK UP INFORMATION ATTACHED

a. Preliminary List of Warrant Articles, February 27, 2024

May 13, 2024 Special Town Meeting Preliminary List of Warrant Articles February 27, 2024

- 1. Auditorium Upgrades and Improvements
- 2. Accept M.G.L. Chapter 59 Section 57A
- 3. Appropriate Children's Hospital Special Permit Funds
- 4. Line Item Transfers:
 - a. FY2024 Operating Budget
 - b. FY2024 Water Enterprise Fund Budget
 - c. FY2024 Sewer Enterprise Fund Budget
- 5. Amend General By-Law Technology Advisory Board (if moved from the ATM Warrant)
- 6. Appropriate for Town-owned Land Survey
- 7. Collective Bargaining (if needed)
- 8. Rescind Debt
- 9. Unpaid Bill of a Prior Year



Select Board TOWN OF NEEDHAM AGENDA FACT SHEET

MEETING DATE: 2/27/2024

Agenda Item	Town Manager's Report
Presenter(s)	Kate Fitzpatrick, Town Manager

1.	BRIEF DESCRIPTION OF TOPIC TO BE DISCUSSED
The	Town Manager will update the Board on issues not covered on the agenda.
2.	VOTE REQUIRED BY SELECT BOARD
N/A	- Discussion Only
3.	BACK UP INFORMATION ATTACHED
Non	e



Select Board TOWN OF NEEDHAM AGENDA FACT SHEET

MEETING DATE: 2/27/2024

Agenda Item	Committee Reports
Presenter(s)	Board Discussion

1. BRIEF DESCRIPTION OF TOPIC TO BE DISCUSSED

Board members may report on the progress and/or activities of their Committee assignments.

2. VOTE REQUIRED BY SELECT BOARD

N/A – Discussion Only

3. BACK UP INFORMATION ATTACHED

None



None.

Select Board TOWN OF NEEDHAM AGENDA FACT SHEET

MEETING DATE: 2/27/2024

		7, 2, 1, 1, 2, 1, 2, 2, 3, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4,
Agen	ıda Item	Executive Session
Pres	enter(s)	
1.	BRIEF DES	SCRIPTION OF TOPIC TO BE DISCUSSED
Need Indep may h	ham Indepen endent Publi	cuss strategy with respect to collective bargaining with the dent Town Workers Association (ITWA) and Needham c Employees Association (NIPEA), where an open meeting ental effect on the bargaining position of the public body and es.
2.	VOTE REQ	UIRED BY SELECT BOARD
Exce the N Indep may l and the	ption 3: To leedham Inde bendent Publi have a detrim he chair so de chair so declar	
3.	BACK UP I	NFORMATION ATTACHED

Water Sewer Billing System Town of Needham Abatement Form

FROM: DEPARTMENT OF PUBLIC WORKS

TO: TOWN TREASURER AND COLLECTOR

CC: TOWN ACCOUNTANT

listed below for the collection of water, sewer revenue and WHEREAS the approporate divisions of the Department of Public Works have submitted to you the following commitment(s) on the dates

account(s) in the amount(s) stated below. WHEREAS certain inadvertent error(s) were made in said commitment(s), it is hearby requested that you abate these particular

Water Admin Fees: Water Irrigation: Water Sales:

-\$3,311.01 \$0.00

\$0.00 -\$14,519.08

Transfer Station Charges:

Sewer Sales:

Total Abatement: -\$17,830.09

\$0.00

Order #: 1324

Read and Approved

Director of Public Works

tendent, DPW

For the Select Board

Date

Town of Needham Water Sewer Billing System Abatement Form

	Customer Location ID Street	cation ID	Street	Domestic		Irrigation	Rescon	
Customer Name	Ð#	#	# Street Name	Water	Sewer	Water	Total Code	;
Diana Babson	29661	8384	21 Mellen St	-\$107.22	_¢371 63	\$0.00	0	c,
Catherine Flaherty	12067	1252	23 Newbury Pk	-\$107.22	-\$321 63	٠ د د د د د د د د د د د د د د د د د د د	÷428.65 COA	5 6
Debra Friedman	6267	13816	1 Standish Rd	-\$107 22	- 20.1.co	÷ 0.00	-\$428.85 COA	Æ
Reverly Levenson	16707	1 1 0 1 0	+ Stational Ad	-5107.22	-\$321.63	\$0.00	-\$428.85 COA	æ
Colinda lawkani	16/9/	14244	41 Parish Rd	-\$107.22	-\$321.63	\$0.00	-\$428.85 COA	æ
Nelinda Lombardo	2309	4736	112 Bradford St	-\$107.22	-\$321.63	\$0.00	-\$428.85 COA	ŝ
Sandra Lynch	2929	3840	58 Plymouth Rd	-\$107.22	-\$321.63	\$0.00	-\$428.85 COA	S (
Elizabeth Mercer	2411	4874	67 Mayo Ave	-\$107.22	-\$321.63	\$0.00	-\$428.85 COA	<u> </u>
Robert Potts	13681	214	43 Peacedale Rd	-\$107.22	-\$321.63	\$0.00	-\$428.85 COA	S :
Nancy Potts	3897	15686	135 Linden St	-\$107.22	-\$321.63	\$0.00	-\$428.85 COA	S
Leonid Dikov	40961	19764	297 Linden St	-\$107.22	-\$321.63	\$0.00	-\$428.85 COA	S i
ivlargarite DelGaizo	11163	1298	27 Hillcrest Rd	-\$107.22	-\$321.63	\$0.00	-\$428.85 COA	Š
Robert Mendolla	20627	10544	99 Central Ave	-\$107.22	-\$321.63	\$0.00	-\$428.85 COA	GB 1
Silella Spector	12471	470	5 Fairfield St	-\$107.22	-\$321.63	\$0.00	-\$428.85 COA	æ
Ellen Grossman	19527	10750	109 Noanett Rd	-\$107.22	-\$321.63	\$0.00	-\$428.85 COA	æ
Louise O Hanley	3459	4504	17 George Aggott	-\$1,669.36	-\$9,881.31	\$0.00	-\$11,550.67 ACC	æ
Potor Friedonkon	/1/3	4332	692 Great Plain Ave	-\$83.98	-\$79.72	\$0.00	-\$163.70 ACC	KB
recei riledelibeig	12391	648	42 Douglas Rd	-\$56.59	-\$55.23	\$0.00	-\$111.82 ACC	KB
			Totals:	Totals: -\$3,311.01 \$0.00	-\$14,519.08	\$0.00	\$0.00 -\$17,830.09	
ALCO LET THIS SERVE AS A LITHORIZATION TO ARATE	VE VILLIOUILIV 3V	20 20 20				,	,	

ALSO, LET THIS SERVE AS AUTHORIZATION TO ABATE ANX PENALTY OR INTEREST WHICH HAS ACCRUED DUE TO THE NON-PAYMENT OF AMOUNTS AS STATED ABOVE.

Verified By:

Mangement Analyst, I