

Project Submissions

Section 3

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Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Police/Fire Station		Fiscal Year: 2019	
Purpose:	Construction	Classification:	Building
Department:	Police	Status:	Amended Request from the Prior CIP
Partners:	Public Facilities, Building Department, Fire/police, IT	Supports:	Public Safety
		Useful Life:	More than twenty-five (25) years
Parameters			Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?			Yes
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?			Yes
3. Does this project require any permitting by any Town or State agency?			Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			Yes
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			No
6. If funded, will additional permanent staff be required?			Yes
		Total New FTE's:	2.5
7. If funded, will the operating budget need to be increased to cover operating expenses?			Yes
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?			No
10. If the project is NOT funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			Yes
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			No
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			Yes
19. If funded, will this project increase the operating expense for any other department?			Yes
Project Cost:	\$65,405,000	How was the Project Cost Determined:	Hired Consultant
Budget Impact:	May increase annual operating expenses by more than \$100,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$5,528,000	\$5,528,000						
Land/ROW Acquisition	\$0							
Site Preparation	\$4,123,889	\$4,123,889						
Construction	\$48,776,111	\$48,776,111						
Construction Management	\$0							
Equipment	\$810,000	\$810,000						
Furniture, Fixtures, and Equipment	\$1,050,000	\$1,050,000						
Technology Hardware/Software	\$4,785,000	\$4,785,000						
Other Expenses	\$332,000	\$332,000						
TOTAL	\$65,405,000	\$65,405,000	\$0	\$0	\$0	\$0	\$0	\$0

\$0

Capital Project Request

Project Title: Police/Fire Station

Fiscal Year: 2019

Project Description and Considerations

The Public Safety Building, located at the intersection of Chestnut Street and School Street, opened in 1931, and was renovated in 1988-1989. Fire Station #2, located at the intersection of Highland Avenue and Webster Street, opened in 1949 and was also renovated in 1988-1989. The amount of space that was originally allocated within both buildings for the Police and Fire Departments is no longer sufficient to accommodate changes in operations, changing personnel needs, technology upgrades, and security improvements, and neither station is fully accessible for individuals with limited mobility.

In 1950, 19 years after the station opened, the Police Department had 25 sworn officers and responded to 1,774 calls. By 2015, the number of sworn officers was 49 and call volume had increased to 31,610. The proposed program meets many deficiencies identified in the Police Department, including the lack of adequate locker facilities for female officers, evidence and property storage, interview rooms and interview recording technology, public meeting space, records storage, dispatch areas, patrol and administrative office space, and report writing space. The prisoner holding cells are outdated and inadequate, and the current prisoner booking area is unsafe due to its size and configuration. The building lacks the ability to handle technology improvements due to available space needed, while the roof continues to leak into the records/server room on the second floor. The current climate control only works sporadically throughout the building creating numerous temperature variations.

In 1950, the Fire Department had 27 firefighters. Call volume data is not available for 1950, but the Department responded to 600 calls in 1960. By 2015, the number of sworn firefighters was 64 and the Department responded to 3,915 calls. The proposed program meets many deficiencies identified in the Fire Department, including apparatus bays that are too small for modern fire trucks, insufficient area for performing equipment maintenance and repair, lack of facilities for storing and cleaning turnout gear, minimal existing office space, inadequate facilities for firefighter support such as bunkrooms, toilets and showers, and insufficient storage space for files and equipment.

The November 2, 2015 and February 10, 2016 Special Town Meetings and the 2017 Annual Town Meeting approved a total of \$390,000 in funding for feasibility studies and schematic design. If the appropriation for design development is approved, the project will be presented to the fall, 2018 Special Town Meeting for construction appropriation, and to the voters at the November 6, 2018 State election for debt exclusion funding.

1. If approved, land acquisition near Station 1 will be funded through available mitigation funds.
2. Building maintenance costs, IT licensing fees, and Townwide expenses.
3. Building, Planning and other related approvals will be needed.
4. ITC supports the request.
6. 2.5 Custodians will need to be added to the staff to meet the maintenance needs of the new complex and Fire Station 2.
7. There will be increase costs associated with the use of the building.
11. Elevator certification.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Town Offices Replacement Furniture **Fiscal Year:** 2019

Purpose:	Acquisition	Classification:	Equipment	Status:	Same Request from the Prior CIP
Department:	Town Manager			Supports:	General Government
Partners:				Useful Life:	More than five (5) years

Parameters

Response

1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	No
6. If funded, will additional permanent staff be required?	No
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	\$50,000	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$0							
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$0							
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$50,000	\$25,000			\$25,000			
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$50,000	\$25,000	\$0	\$0	\$25,000	\$0	\$0	\$0

\$0

Capital Project Request

Project Title: Town Offices Replacement Furniture

Fiscal Year: 2019

Project Description and Considerations

Town Hall was renovated with new furniture when it re-opened in September, 2011. In FY2022, the furniture will be 10 years old and will need to start to be replaced, where applicable due to heavy wear and tear.

The Public Services Administration Building was opened as a new building with new furniture in February, 2010. In FY2022, the furniture will be 12 years old and the more worn and broken furniture will need to start to be replaced.

A furniture inventory, including current condition, has been done for the Town Hall and for the Public Services Administration Building and will be updated annually. It has been attached to this request.

In Fiscal Year 2019, furniture scheduled to be replaced would be the Town Hall's Board of Selectmen's conference table and chairs (to go around table) and as much of the poor and fair conditioned furniture as already established from the Public Services Administration Building.

In Fiscal Year 2022, furniture to be replaced will be as much of the stated "poorer condition" furniture as budget request would allow. Depending upon the condition of the furniture in out-lying years, this request may be repeated either annually or every other year.

FYI - replacement furniture prices at 2018 pricing: office task chairs \$830 each. 3 drawer regular file cabinets \$725 each. 15' wooden conference table \$8-10K, conference chairs \$350 each, sled chairs in Powers Hall \$700 each.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request					
Project Title: Center At The Heights Computer Lab Hardware / Software Replacement				Fiscal Year: 2020	
Purpose:	Acquisition	Classification:	Technology	Status:	Same Request from the Prior CIP
Department:	Finance			Funding Source:	General Fund
Partners:					
Parameters					Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?					No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?					No
3. Does the project support activities to produce new revenue for the Town?					No
4. Does this project require any permitting by any Town or State agency?					No
5. If funded, will additional permanent staff be required?					No
6. If funded, will the operating budget need to be increased to cover operating expenses?					No
7. If funded, will this project increase the operating expense for any other department?					No
8. If funded, will this project lower the requesting Department's operating costs?					No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?					No
10. If the project is NOT funded, will current Town revenue be reduced?					No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?					No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?					No
13. Is this a request in response to a Court, Federal, or State order?					No
14. Is this a request in response to a documented public health or safety condition?					No
15. Is this a request to improve or make repairs to extend the useful life of a building?					No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?					No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?					No
18. Will any other department be required to provide assistance in order to complete the project?					No

Primary Reason for the Request: Scheduled replacement
 How was the Estimated Project Cost Determined: In-House Estimate Estimated Project Cost: \$50,000
 Useful Life: More than five (5) years but less than eight (8) years
 Budget Impact: Negligible impact on the annual operating expenses less than \$5,000
 Total New FTE's: 0

Project Budget Elements	Project Budget	2020	2021	2022	2023	2024
Planning/Feasibility	\$0					
Design/Engineering	\$0					
Land/ROW Acquisition	\$0					
Site Preparation	\$0					
Construction	\$0					
Construction Management	\$0					
Equipment	\$0					
Furniture, Fixtures, and Equipment	\$0					
Technology Hardware/Software	\$50,000	\$50,000				
Other Expenses	\$0					
TOTAL	\$50,000	\$50,000	\$0	\$0	\$0	\$0

\$0

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: **Center At The Heights Computer Lab Hardware / Software Replacement**

Fiscal Year: **2020**

Project Description and Considerations

FY 2020

The purpose of this request is to replace the hardware and upgrade software associated with the Center at The Heights (CATH) Computer Lab. This will include 20 desktops, 4 laptops, a server, switch, and firewall. Also being upgraded would be any software associated with the specific operation. Typically throughout other departments across the Town the Information Technology Center (ITC) looks at individual pieces of hardware and determines its need for replacement. However since this equipment and software was purchased and installed at the same time, as well as the nature of the use of the equipment, it will be better to keep the same make and models of hardware and software instead of mixing and matching. New models will be able to take advantage of upgraded operating systems and faster processors to better serve the users of the Computer Lab. If the funding does not occur there is currently not sufficient funding in the ITC budget to cover the cost of replacing the added pieces of hardware. Outside of this request for replacement the move of the Council on Aging to the CATH more than double the number of computers for that department. That in itself will draw more funds from the ITC over time making it harder to use currently budgeted dollars for the replacement of hardware and software in the CATH Computer Lab.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: **Non-Public Safety Data Center Servers and Storage Units** Fiscal Year: **2019**

Purpose:	Acquisition	Classification:	Technology	Status:	Revised Request from the Prior CIP
Department:	Finance	Funding Source:	General Fund		
Partners:					

Parameters	Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does the project support activities to produce new revenue for the Town?	No
4. Does this project require any permitting by any Town or State agency?	No
5. If funded, will additional permanent staff be required?	No
6. If funded, will the operating budget need to be increased to cover operating expenses?	No
7. If funded, will this project increase the operating expense for any other department?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	Yes
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No

Primary Reason for the Request: Obsolete/non-functioning
 How was the Estimated Project Cost Determined: In-House Estimate Estimated Project Cost: \$325,000
 Useful Life: More than five (5) years but less than eight (8) years
 Budget Impact: Negligible impact on the annual operating expenses less than \$5,000
 Total New FTE's:

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023
Planning/Feasibility	\$0					
Design/Engineering	\$0					
Land/ROW Acquisition	\$0					
Site Preparation	\$0					
Construction	\$0					
Construction Management	\$0					
Equipment	\$0					
Furniture, Fixtures, and Equipment	\$325,000	\$180,000				\$145,000
Technology Hardware/Software	\$0					
Other Expenses	\$0					
TOTAL	\$325,000	\$180,000	\$0	\$0	\$0	\$145,000

\$0

Capital Project Request

Project Title: **Non-Public Safety Data Center Servers and Storage Units**

Fiscal Year: **2019**

Project Description and Considerations

FY19 \$180,000.00 Data Center 1 and Data Center 2 Hardware Replacements
FY23 \$145,000.00 Data Center 1 and Data Center 3 Hardware Replacements

This project is for the replacement of hardware within the three Town of Needham data centers. Phase I of the project, which is taking place in the current fiscal year (FY18), will be the replacement of four servers, two storage units, and four switches. Phase II of the project will be the replacement of six servers, two storage units, and four switches. Data Center 1 is housed at the Town Hall, Data 2 is housed at the Public Services Administration Building, and Data Center 3 is housed at The Center at The Heights. Data Center 1 is the primary data center where the Town Departments access files and programs, the internet, and network and internet security takes place. The six servers at Town Hall are physical servers however three of them maintain and support upwards of 50 virtual servers with corresponding data maintained on the storage units. The other three are for specific software functions. The servers, storage unit, and switches at the Public Services Administration Building act as fail over in case of the Town Hall network and infrastructure going offline. The server and storage at The Center at The Heights is where backup data is housed and from there certain segments of the data are migrated off site using a Code42 business account. All of the current servers are Dell PowerEdge R400 - R700 series, the storage units are Dell Equallogics PS4000 - PS6000 series, and the switches are Dell PowerConnect 8000 series.

The Information Technology Center (ITC) is currently reviewing the data center design as described above to determine if a hyper-converged environment will be financially viable moving forward based on the FY18 and FY19 dollar requests. In a hyper-converged data center the infrastructure systems architecture is software-centric which integrates and consolidates compute, storage, networking and virtualization resources into minimal hardware. Using a hyper-converged data design between Data Center 1 and Data Center 2 would mean replacing the 20 devices that currently reside between these two locations with 4 – 6 devices in total between the two locations. Instead of 10 pieces of hardware in each location there would be 2 – 3 pieces of hardware in each location. This includes the switching hardware as well. Data Center 3 would still act as the location for back-ups of the data centers but would be using hardware that is less robust and still off siting back-ups with the Code42 cloud solution. ITC is also looking cloud based options as a Business Continuity/Disaster Recovery solution. During the first half of FY18 ITC will be engaged in demonstrations with vendors to better understand if a hyper-converged data center design will satisfy the data center demands of the Town. The goal is to find a solution that minimizes the amount of technology hardware needed as well as building space which in the long run will lessen the financial burden on ITC and any future buildings where ITC maintains and supports technology. For continuity sake the FY 2018 dollars (\$145,000) were included in the current request and can be seen under 2023. ITC uses a five year replacement model for infrastructure hardware. Next year's submission for this request will also include a Fiscal Year 2024 request for \$180,000 as represented in the current Fiscal Year 2019 request.

The importance of this project is to maintain hardware at a level that will support the needs of the Town Departments as well as either continuing or changing the model developed for Business Continuity. As equipment gets older it becomes harder and harder to maintain the same level of quality and performance when initially installed directly effecting the day to day operation of the Town. There are currently ITC operating budget dollars used for licensing for the both hardware and software maintenance and support.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Public Safety Data Center Servers and Storage Units		Fiscal Year: 2019	
Purpose: Acquisition	Classification: Technology	Status:	Same Request from the Prior CIP
Department: Finance	Funding Source: General Fund		
Partners: Public Safety			

Parameters	Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does the project support activities to produce new revenue for the Town?	No
4. Does this project require any permitting by any Town or State agency?	No
5. If funded, will additional permanent staff be required?	No
6. If funded, will the operating budget need to be increased to cover operating expenses?	No
7. If funded, will this project increase the operating expense for any other department?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	Yes
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No

Primary Reason for the Request: Obsolete/non-functioning
 How was the Estimated Project Cost Determined: In-House Estimate Estimated Project Cost: \$90,000
 Useful Life: More than five (5) years but less than eight (8) years
 Budget Impact: Negligible impact on the annual operating expenses less than \$5,000
 Total New FTE's:

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023
Planning/Feasibility	\$0					
Design/Engineering	\$0					
Land/ROW Acquisition	\$0					
Site Preparation	\$0					
Construction	\$0					
Construction Management	\$0					
Equipment	\$0					
Furniture, Fixtures, and Equipment	\$0					
Technology Hardware/Software	\$90,000	\$30,000		\$60,000		
Other Expenses	\$0					
TOTAL	\$90,000	\$30,000	\$0	\$60,000	\$0	\$0

\$0

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: **Public Safety Data Center Servers and Storage Units**

Fiscal Year: **2019**

Project Description and Considerations

FY19 \$30,000.00 Digital Video Recorder

FY21 \$60,000.00 Public Safety Computer Aided Dispatch (CAD) Hardware Replacement

This project request consists of two elements used by Public Safety. The first element, Digital Video Recorder, is used internally and externally by the Needham Police Department. There are multiple cameras within the Needham Police Department from the front entrance to the jail cells and throughout the multiple hallways and areas. There are also several cameras on the external structure of the Public Safety Building as well as Town Hall that are managed through the Digital Video Recording hardware from the Police Department. These devices are used for safety and security of the officers and any other individuals who may find themselves within the Needham Police Department. The second element of the project request is the replacement of Public Safety CAD hardware installed during the FY15 upgrade of the Public Safety CAD software. The software piece of the Public Safety CAD project was funded by a capital request while the hardware piece of the Public Safety CAD project, as well as the Digital Video Recorder equipment, was funded using State 911 Grant Funds. However during CY15 the State put a hold on all future funding of the 911 Grants. Because of the uncertainty of the funding from the State it is important to place this request out into the future. There are currently ITC operating budget dollars used for licensing for the both the Digital Video Recording item. Dollars for the Public Safety CAD hardware and software maintenance and support will be available through savings starting FY18 due to the ending of support for the replaced Sungard Public Safety modules.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Public Safety Mobile Devices		Fiscal Year: 2019	
Purpose: Acquisition	Classification: Technology	Status:	Same Request from the Prior CIP
Department: Finance	Funding Source: General Fund		
Partners: Public Safety			

Parameters	Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does the project support activities to produce new revenue for the Town?	No
4. Does this project require any permitting by any Town or State agency?	No
5. If funded, will additional permanent staff be required?	No
6. If funded, will the operating budget need to be increased to cover operating expenses?	No
7. If funded, will this project increase the operating expense for any other department?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	Yes
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No

Primary Reason for the Request: Scheduled replacement
 How was the Estimated Project Cost Determined: In-House Estimate Estimated Project Cost: \$70,000
 Useful Life: More than five (5) years but less than eight (8) years
 Budget Impact: Negligible impact on the annual operating expenses less than \$5,000
 Total New FTE's:

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023
Planning/Feasibility	\$0					
Design/Engineering	\$0					
Land/ROW Acquisition	\$0					
Site Preparation	\$0					
Construction	\$0					
Construction Management	\$0					
Equipment	\$0					
Furniture, Fixtures, and Equipment	\$0					
Technology Hardware/Software	\$70,000	\$35,000	\$35,000			
Other Expenses	\$0					
TOTAL	\$70,000	\$35,000	\$35,000	\$0	\$0	\$0
\$0						

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: **Public Safety Mobile Devices**

Fiscal Year: **2019**

Project Description and Considerations

This project is for the replacement of laptops and tablets that are used in the Needham Police and Fire Department Vehicles. The hardware is used to access multiple applications during the the daily operations of either an individual or vehicle. The hardware communicates with the Public Safety CAD software as well as State and Federal databases. The devices themselves are hardened military specification hardware manufactured for above normal use in more intensive environments than normal off the shelf hardware. The current hardware is a mix a Panasonic ToughBooks and ToughTablets. In the past the hardware was funded using State 911 Grant Funds. However during CY15 the State put a hold on all future funding of the 911 Grants. Because of the uncertainly of the funding from the State it is important to place this request out into the future. There are currently ITC operating budget dollars used for licensing for both hardware and software maintenance and support.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Revenue and General Ledger/Accounting Software Package Replacement		Fiscal Year: 2021	
Purpose: Acquisition	Classification: Technology	Status:	Same Request from the Prior CIP
Department: Finance	Funding Source: General Fund		
Partners:	Treasurer's Office, Accounting Department, Finance Department, School Business Office, School Human Resources, Payrol, IT Services		

Parameters	Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does the project support activities to produce new revenue for the Town?	Yes
4. Does this project require any permitting by any Town or State agency?	No
5. If funded, will additional permanent staff be required?	No
6. If funded, will the operating budget need to be increased to cover operating expenses?	Yes
7. If funded, will this project increase the operating expense for any other department?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	Yes
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	Yes
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	Yes

Primary Reason for the Request: Operational efficiency
 How was the Estimated Project Cost Determined: In-House Estimate Estimated Project Cost: \$1,100,000
 Useful Life: Between eight (8) and twelve (12) years
 Budget Impact: May increase annual operating expenses between \$5,001 and \$25,000
 Total New FTE's:

Project Budget Elements	Project Budget	2021	2022	2023	2024	2025
Planning/Feasibility	\$0					
Design/Engineering	\$0					
Land/ROW Acquisition	\$0					
Site Preparation	\$0					
Construction	\$0					
Construction Management	\$0					
Equipment	\$0					
Furniture, Fixtures, and Equipment	\$0					
Technology Hardware/Software	\$1,100,000	\$1,100,000				
Other Expenses	\$0					
TOTAL	\$1,100,000	\$1,100,000	\$0	\$0	\$0	\$0
\$0						

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: **Revenue and General Ledger/Accounting Software Package Replacement**

Fiscal Year: **2021**

Project Description and Considerations

The Revenue and General Ledger/Accounting Software Package Replacement is a request to replace the current Revenue and General Ledger/Accounting Software Packages. The current Revenue Application was first purchased in 1996 and has gone through several versions since the original implementation. Its primary function is the collection of Real Estate and Personal Property Tax, Excise Tax, Utility Fees, and Miscellaneous Revenues collected among both Town and School Departments. There are other modules that are incorporated with the Revenue Package and these include Customer Information, Land /Parcel Management, and Cash Receipts. There has been a need for better reporting out of the Revenue package which is currently housed on an IBM piece of hardware. All of the specialized programming and process in the Revenue Application is done using COBOL which in combination with the IBM hardware is becoming more and more difficult for the Information Technology Center (ITC) to support. Migrating both the application and hardware to a non-IBM piece of hardware would bring that specific application and hardware into the business model currently in place in the ITC. The General Ledger/Accounting Software Package has been in place since FY14. The movement to a different vendor providing the General Ledger/Accounting Software Package has been both beneficial and troublesome at the same time. Though some reporting, requisition, and rollover processes have seen improvement the fact that the Revenue and General Ledger/Accounting packages are from two different vendors and hardware types has caused some problems. Most of those problems involve certain processes becoming more tedious and time consuming leading to delays in departments disseminating information. These processes range from revenue posting, cash reconciliation, bank account reconciliation, and personnel reporting. The complexity of the Town's payroll has also pushed the limits of the General Ledger/Accounting package leading to some confusion from certain employee groups about the line items on payroll checks and direct deposit notices. There may need to be additional cost increases for ongoing annual maintenance in comparison to the current Revenue and General Ledger/Accounting Software Packages. It is difficult to say the exact amount at this time but is anticipated these costs will be more due to the complex nature of the Town's business and the level of application needed. Also after implementation there may be situations that may require programming specialization which the vendor would supply. The planning and implementation for this project will involve multiple Town departments (Treasurer's Office, Accounting Office, Assessor's Office, Human Resources) as well as School departments (Business Office, Human Resources, Payroll, Information Technology Services).

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: **Technology Systems and Applications Updates** Fiscal Year: **2023**
 Purpose: **Acquisition** Classification: **Technology** Status: **Revised Request from the Prior CIP**
 Department: **Finance** Funding Source: **Revolving Fund**
 Partners: **DPW Engineering**

Parameters	Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does the project support activities to produce new revenue for the Town?	No
4. Does this project require any permitting by any Town or State agency?	No
5. If funded, will additional permanent staff be required?	No
6. If funded, will the operating budget need to be increased to cover operating expenses?	No
7. If funded, will this project increase the operating expense for any other department?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No

Primary Reason for the Request: **Operational efficiency**
 How was the Estimated Project Cost Determined: **In-House Estimate** Estimated Project Cost: **\$100,000**
 Useful Life: **More than five (5) years but less than eight (8) years**
 Budget Impact: **Negligible impact on the annual operating expenses less than \$5,000**
 Total New FTE's:

Project Budget Elements	Project Budget	2023	2024	2025	2026	2027
Planning/Feasibility	\$0					
Design/Engineering	\$0					
Land/ROW Acquisition	\$0					
Site Preparation	\$0					
Construction	\$0					
Construction Management	\$0					
Equipment	\$0					
Furniture, Fixtures, and Equipment	\$0					
Technology Hardware/Software	\$100,000	\$100,000				
Other Expenses	\$0					
TOTAL	\$100,000	\$100,000	\$0	\$0	\$0	\$0
\$0						

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: **Technology Systems and Applications Updates**

Fiscal Year: **2023**

Project Description and Considerations

1) Imagery and Planimetric Data Updates:

The Imagery and Planimetric Data Updates (previously titled Geographic Information Systems Upgrade) project is a request for a flight to update aerial imagery and then use that aerial imagery to update the Town's planimetric data. The aerial imagery and planimetric data is used across Town departments but it is most used by Public Works Engineering using computer aided design (CAD) software and the Information Technology Center Geographic Information System (GIS) Administrator using GIS software (ESRI, Inc) in support of multiple Town and School Departments. CAD and GIS are systems that use hardware and software for storage, retrieval, mapping, analysis, design, and planning. The planimetric data is the electronic representation of above ground physical structures and features. These physical structures and features are then associated with layers in CAD and geospatial information and databases in GIS which then allows for the different departments to use the planimetric data for needs specific to each department. The updated planimetric data will be incorporated into the Town's web GIS as well as secure web GIS sites accessed by DPW Divisions for viewing and querying as well as the Engineering Division using the data for planning and design projects. Because Water & Sewer, Planning, Conservation and other Town and School Departments use or request services specific to the planimetric data it is important to have up to date data so these departments can plan, analyze and display with as accurate a representation of the physical structures and features. Licensing costs to use the data through specific software are currently paid through the operating budget. The use of new planimetrics and imagery will not directly cause any increase to these costs.

The revision to this CIP is that the starting fiscal year was changed from 2022 to 2023. This CIP request is a recurring request with the most recent fulfillment of the request happening in Fiscal Year 2015. The initial phase of the Imagery and Planimetric Data Updates is to fly the Town and collect imagery which is then used to collect planimetric data. However due to a heavy snow fall during the winter of 2014 - 2015 that left substantial snow on the ground in the spring of 2015 the flight did not take place. The flight was rescheduled for the spring of 2016 but due to technical problems with the flight that took place in the spring of 2016 the imagery deliverables did not take place. The flight did take place this past spring 2017 and the imagery deliverables should be available by the end of October 2017. Because of these delays and the fact that the flight took place this year it was decided to push the next flight for imagery and collection of planimetric data out one year.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Town Side Multi-Function Printer Devices		Fiscal Year: 2019	
Purpose: Acquisition	Classification: Technology	Status:	Revised Request from the Prior CIP
Department: Finance	Funding Source:		Revolving Fund
Partners:			

Parameters	Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does the project support activities to produce new revenue for the Town?	No
4. Does this project require any permitting by any Town or State agency?	No
5. If funded, will additional permanent staff be required?	No
6. If funded, will the operating budget need to be increased to cover operating expenses?	No
7. If funded, will this project increase the operating expense for any other department?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No

Primary Reason for the Request: Obsolete/non-functioning
 How was the Estimated Project Cost Determined: In-House Estimate Estimated Project Cost: \$142,400
 Useful Life: Between eight (8) and twelve (12) years
 Budget Impact: Negligible impact on the annual operating expenses less than \$5,000
 Total New FTE's:

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023
Planning/Feasibility	\$0					
Design/Engineering	\$0					
Land/ROW Acquisition	\$0					
Site Preparation	\$0					
Construction	\$0					
Construction Management	\$0					
Equipment	\$0					
Furniture, Fixtures, and Equipment	\$0					
Technology Hardware/Software	\$142,400	\$35,600	\$35,600	\$35,600	\$35,600	
Other Expenses	\$0					
TOTAL	\$142,400	\$35,600	\$35,600	\$35,600	\$35,600	\$0

\$0

Capital Project Request

Project Title: **Town Side Multi-Function Printer Devices**

Fiscal Year: **2019**

Project Description and Considerations

This project is for the replacement of multi-function printers throughout the four primary Town locations (Town Hall, Public Services Administration Building, Public Safety, Center at The Heights) due to either being obsolete or part of a planned schedule replacement. In all there are nine of these devices between the buildings with only three of the devices not purchased during a capital project. Though several of these devices are currently over six years old, with one over eight, only one has reached 50% of the anticipated life cycles for each model according to the manufacturer estimated cycles per year. Based on the current usage the expected life of these devices is between ten and twelve years however the manufacturer of these devices does not guarantee the availability of parts or consumables past seven years. The cycle for replacement of these multi-function printers would be seven years. During their replacement they would be replaced with devices similar in specifications. Due to the time out till replacement it is difficult to give an actual make and model that would be purchased. The current devices are listed below.

The revision to this request is that the fiscal year of start was moved forward two years from fiscal year 2021 to fiscal year 2019. The movement forward request was made, after conversation with the Town Manager, because of the increase of device downtime which required maintenance causing time lost waiting for printing projects as well as the issue, as noted above, with the lack of availability of parts and consumables from the manufacturer past seven years. More frequently, OEM consumables and parts have been replaced with refurbished and third party parts which in some case have not worked with the older multi-function printers. By fiscal year 2019 the age of the majority of these devices will range from five to eight years with the remaining three to four years old. The process of determining which devices will be replaced will be based on the age of the machine and the overall amount of use.

- 1) Public Services Administration Building, 2nd Floor, Ricoh Aficio MP 7500
- 2) Public Services Administration Building, 1st Floor, Ricoh Aficio MP 7501
- 3) Public Services Administration Building , 2nd Floor , Ricoh Aficio MP 8001
- 4) Town Hall, Lower Level, Ricoh Aficio MP 7501
- 5) Town Hall, 1st Floor, Ricoh Aficio MP 7501
- 6) Town Hall, Lower Level, Ricoh Pro 1357EX
- 7) Center at the Heights Copy Room RICOH MP C5503
- 8) Public Safety, Police, Konica Minolta Biz Hub 350
- 9) Public Safety, Fire, Konica Minolta Biz Hub 350

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Fleet Replacement Program **Fiscal Year:** 2019

Purpose:	Acquisition	Classification:	Equipment	Status:	Amended Request from the Prior CIP
Department:	Finance			Supports:	Other (see below for information)
Partners:	Building, Fire, Health and Human Services, Police, Public Works, and the School Department			Useful Life:	Varies between 6 and 20 years

Parameters **Response**

1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	Not Applicable
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	Not Applicable
6. If funded, will additional permanent staff be required?	Total New FTE's: 0 No
7. If funded, will the operating budget need to be increased to cover operating expenses?	Yes
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	Yes
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	Not Applicable
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	Yes
19. If funded, will this project increase the operating expense for any other department?	Yes

Project Cost:	\$8,284,433	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	May increase annual operating expenses between \$5,001 and \$25,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$0							
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$0							
Construction Management	\$0							
Equipment	\$8,284,433	\$2,968,440	\$1,587,898	\$694,676	\$2,037,020	\$996,399		
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$8,284,433	\$2,968,440	\$1,587,898	\$694,676	\$2,037,020	\$996,399	\$0	\$0

\$0

Capital Project Request

Project Title: Fleet Replacement Program

Fiscal Year:

2019

Project Description and Considerations

The Town's fleet replacement program is funded through both the capital plan and the operating budget. A major equipment expense for the Town is rolling stock. The Town relies upon many types and sizes of vehicles in order to provide services, respond to emergencies, maintain public facilities, and improve the infrastructure in the community. The fleet replacement program consolidates all vehicles and special equipment attachments under one submission, but allocation of resources is looked at on a department by department basis rather than as one global replacement schedule. Needs and purposes for equipment differ significantly, and no department can do its work without the equipment. We classify the fleet program in three categories: core fleet (general purpose vehicles), special purpose/high value vehicles, and snow and ice equipment. The program is intended to centrally present and review the Town's rolling stock operations in order to ensure timely, cost effective, and high quality replacement of vehicles, maintenance, fueling, and short-term transportation. However, the Police Department vehicles are not included in this request. Generally, the Police Department vehicles are funded through the operating budget as many vehicles in the department do not meet the threshold to be considered part of the capital program. A majority of the Town's fleet maintenance and management is performed by the Garage Division of the Public Works Department. Other maintenance work is provided off-site by vendors due to factors such as specialized work, volume, or warranty.

Managing and maintaining a fleet of more than 200 vehicles – from passenger vehicles to large heavy duty diesel trucks and tractors – involves some of the Town's most environmentally consequential choices. Considering the number of vehicles purchased and the thousands of gallons of fuel used, the fleet represents one of the Town's opportunities to meet its goal of environmentally responsible and sustainable operations.

The most obvious and substantial environmental impacts of the fleet for the Town are, of course, tailpipe emissions and fuel use. However, an environmentally superior fleet encompasses a number of other factors, only some of which are under the control of fleet operations. For example, the Town's ability to influence vehicle manufacturing is limited, even though the process involves huge amounts of material extraction, use of natural resources and is responsible for significant air and water pollution. The elements that the Town's fleet operations can control or influence to achieve a cleaner and greener fleet include the following:

- Fleet size
- Fuel use, type, and amount
- Fueling procedures - preventing pollution from incidental fuel spills
- How vehicles are maintained, e.g. avoiding oil leaks, ensuring proper tire inflation, etc.
- Use of maintenance materials, e.g., alternatives to hydraulic fluids, or recycled anti-freeze
- Use of recycled oil, and, as appropriate, tires
- Use, storage and disposal of hazardous materials used in vehicle maintenance
- Vehicle type, e.g., fuel efficiency, size, and availability of alternatives

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Capital Project Request

Project Title: Fleet Replacement Program

Fiscal Year:

2019

Supplemental Information

The Town's fleet replacement program was established in FY2015. This represents a budget and schedule for the Town's rolling stock fleet of approximately 232 vehicles, trailers, and large specialized attachments and the School Department fleet of vans and buses. General purpose vehicles include pickup trucks, a variety of sedans, SUV's, vans, and police vehicles (81). They comprise approximately 35 percent of the entire fleet. General purpose vehicles are utilized in every department and are relatively inter-changeable. The replacement of these vehicles can proceed on a regular schedule and should be considered part of the Town's base recurring costs.

The Town relies on a number of trailers for the purpose of moving tools and equipment, hauling trash and debris, and transporting special equipment. The Town has 56 trailers, which represents approximately 24 percent of the fleet, many of the trailers have a replacement cost that falls below the capital threshold. When a low dollar value trailer is recommended for replacement, the funding request is submitted by the individual department with its operating budget request.

Specialized, high value vehicles, and snow and ice equipment comprise of the other 35 percent of the fleet. These vehicles and equipment are just as integral to Town operations as the general purpose vehicles, but serve the unique purposes of specific departments or divisions. Included in this group are the high value vehicles such as ambulances, large dump trucks, fire engines, street sweepers, and others for which appropriations need to be planned.

The intent and goal of the fleet replacement program is to: Replace vehicles before service delivery is impacted negatively; maximize vehicle availability for all user departments; minimize costs from vehicle downtime and emergency maintenance and operational costs; take advantage of opportunities to implement new technology to achieve fuel conservation and reduced emissions; promote safety, reliability and operational efficiencies; and enhance the public image of the Town's fleet.

The estimated cost of the identified replacements (including the school department) for core fleet, specialize equipment, and snow and ice equipment is \$8,284,433 which is up from the prior CIP five-year submission of \$7,693,399. The change is due to the addition of fiscal year 2023 and increased cost estimates for some specialized equipment, most notably fire apparatus, and several vehicles which should be replaced in FY2019 which is earlier than planned (for example units 28, 94, 107, and 143) or were not funded in the previous year (unit 457). The estimated core fleet replacement cost over the five year period is \$2,385,803, which is up from the prior CIP amount of \$1,853,131; specialized equipment is \$5,548,947 which is also higher than prior CIP of \$5,198,833; and snow and ice equipment is \$328,346 which down from the prior amount of \$641,436. The FY2019 request is for vehicles that have been identified to be replaced based on, condition, functionality, usability, or cost of maintenance. The vehicles identified for replacement in FY2020 and beyond are based on industry recommended replacement schedules. However, the schedule is adjusted annually based on the actual condition of the vehicles, the serviceability of the vehicles, demands on the equipment, and financial resources.

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Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Fleet Replacement Program

Fiscal Year:

2019

Supplemental Information

The total request consists of both General and Enterprise Fund assets of which the portion that relates to an enterprise fund would be paid by the applicable enterprise fund. The table below summarizes the amount that would be paid from enterprise funds if approved.

	2019	2020	2021	2022	2023	Total
RTS	\$245,360	\$34,783	\$ 0	\$153,337	\$264,984	\$ 698,464
Sewer	\$132,111	\$239,000	\$60,046	\$ 978,395	\$42,558	\$1,452,110
Water	\$355,048	\$35,803	\$84,428	\$224,759	\$0	\$ 700,038

Specific Questions:

Question 7: If funded, will the operating budget need to be increased to cover operating expenses? Yes, as part of the fleet replacement program, there are recommendations to change some of the vehicles types or increase the number of vehicles available for use. In those years where such a change is approved, there may be an increase in insurance, and perhaps specialized tools in order to better maintain the new equipment.

Question 11: Is specialized training or annual licensing required that the Town will need to pay in order to use the asset? Yes, some vehicles require a commercial driver's license to operate. Other vehicles have specialized equipment which requires period training and demonstrations on the proper use of the equipment.

Question 18: Will any other department be required to provide assistance in order to complete the project? Yes, the various requesting departments must assist in the final assessment of the vehicle to be replaced, procurement of the new vehicle, and the discontinuation or transfer of the current vehicle. The vehicle may be retained as a pool vehicle for the department, transferred to another department, auctioned or traded, or otherwise disposed.

Question 19: If funded, will this project increase the operating expense for any other department? Increase costs may be incurred for any department that increases the number of vehicles used in the fleet. The Town's commercial and vehicle insurance expense could increase.

Town of Needham
Capital Improvement Plan
January 2018

Vehicle to be Replaced	Dept	FY2019 Department Request Last Year	FY2019 Department Request This Year	FY2020 Department Request Last Year	FY2020 Department Request This Year	FY2021 Department Request Last Year	FY2021 Department Request This Year	FY2022 Department Request Last Year	FY2022 Department Request This Year	FY2023 Department Request NEW
Replace Unit 457 Ford Taurus	19		21,336							
Replace Unit 1 Ford Escape Hybrid	23.1	31,625	33,616							
Replace Unit 44 Ford Escape Hybrid	23.3	31,625	33,616							
Replace Unit 46 Ford Escape Hybrid	23.3	31,625	33,616							
Replace Unit 4 Ford F350	23.4	56,054	82,671							
Replace Unit 55 Ford F550	23.5	70,756	142,495							
Replace Unit 76 BOBCAT A300 SKID STEER	23.5	87,240	122,182							
Replace Unit 107 CAMOPLAST SW4S	23.5	0	190,811	186,358						
Replace Unit 181 Elgin PELICAN Sweeper	23.5	291,815	264,101							
Replace Unit 38 INTERNATIONAL IH 4300 Series	23.6	199,328	202,169							
Replace Unit 65 Ford F350	23.6		66,037							
Replace Unit 183 GIANT UTILITY LEAF PICKER TRAILER	23.6	28,336	25,722							
Replace Unit 301 FORD E150 VAN	23.6	30,464	34,069							
Replace Unit 143 CASE LOADER 721E	100	0	245,360					302,274		
Replace Unit 28 Ford F350	200	0	64,247	58,016						
Replace Unit 94 Ford F250	200	0	67,864							
Replace Unit 14 INTERNATIONAL 7400 Series	300	230,918	239,404							
Replace Unit 22 Ford F450	300	64,097	115,644							
Replace Unit 27 Ford F150	300					36,000				
Replace Unit 702 Ford F250	23.2		45,765							

Town of Needham
Capital Improvement Plan
January 2018

Vehicle to be Replaced	Dept	FY2019 Department Request Last Year	FY2019 Department Request This Year	FY2020 Department Request Last Year	FY2020 Department Request This Year	FY2021 Department Request Last Year	FY2021 Department Request This Year	FY2022 Department Request Last Year	FY2022 Department Request This Year	FY2023 Department Request NEW
Replace Unit E02 E-ONE CYCLONE ii Fire Truck	18	666,339	840,163							
Replace Unit Van 4 FORD E150 VAN	21	34,025	48,776							
Replace Unit Van 5 FORD E150 VAN	21	34,025	48,776							
Replace Unit 92 FORD EXPLORER	23.3			38,385	38,385					
Replace Unit 10 INTERNATIONAL 7400 Series	23.5			239,000	239,000					
Replace Unit 39 Ford F550	23.5			73,233	73,233					
Replace Unit 57 Ford F350	23.5				66,407			50,123		
Replace Unit 102 JOHN DEERE LOADER 544J	23.5			181,481	181,481					
Replace Unit 182 FREIGHTLINER ELGIN CROSSWIND SWEEPER	23.5	291,815			302,028					
Replace Unit 253 VERMEER STUMP CUTTER	23.6				54,207					
Replace Unit 256 TRAILER UTILITY	23.6			44,005	44,005					
Replace Unit 56 Ford F150	100			34,783	34,783					
Replace Unit 29 INTERNATIONAL 7400 Series	200			239,000	239,000					
Replace Unit 164 Trailer ATLAS Copco	300			35,803	35,803					
Replace Unit 705 Ford Econ Van E250	23.2				37,571					
Replace Unit C-42 Ford Sedan	18			41,066	50,462					
Replace Unit Bus 14 IC SCHOOL BUS	21			94,975	90,568					
Replace Unit Van 1 FORD E150 VAN	21			35,216	50,483					
Replace Unit Van 2 FORD E150 VAN	21			35,216	50,483					
Replace Unit 2 Ford F150 XL	23.4					36,000	36,000			

Town of Needham
Capital Improvement Plan
January 2018

Vehicle to be Replaced	Dept	FY2019 Department Request Last Year	FY2019 Department Request This Year	FY2020 Department Request Last Year	FY2020 Department Request This Year	FY2021 Department Request Last Year	FY2021 Department Request This Year	FY2022 Department Request Last Year	FY2022 Department Request This Year	FY2023 Department Request NEW
Replace Unit 113 CAMOPLAST SW4S	23.5			186,358			192,880			
Replace Unit 350 JOHN DEERE TRACTOR LOADER 4720	23.6						53,156	55,016		
Replace Unit 23 Ford F350	200					60,046	60,046			
Replace Unit 26 Ford F150	300					48,428	48,428			
Replace Unit 31 Ford F150	300					36,000	36,000			
Replace Unit 707 Ford Econ Van E250	23.2	36,301					38,886			
Replace Unit 713 Ford F450 Dump Truck	23.2							71,066		
Replace Unit C-01 FORD EXPLORER	18					60,464	51,133			
Replace Unit C-06 Ford F350	18					57,384	73,647			
Replace Unit Van 7 FORD E250 VAN	21					49,536	52,250			
Replace Unit Van 8 FORD E250 VAN	21					49,536	52,250			
Replace Unit 400 Ford Taurus	19							30,018	38,310	
Replace Unit 45 FORD E150 VAN	23.3							33,776	38,467	
Replace Unit 3 Ford F450	23.4							71,066	84,163	
Replace Unit 32 Ford F350	23.5							50,123	71,137	
Replace Unit 43 Ford F350	23.5							50,123	71,137	
Replace Unit 124 ADDCO MINI UTILITY TRAILER	23.5							26,429	26,429	
Replace Unit 168 GORMAN UTILITY TRAILER	23.6							37,706	37,706	
Replace Unit 186 GIANT LEAF VAC TRAILER	23.6							27,275	27,275	
Replace Unit 91 CONSTRUCTION SCALP TRUCK	100							153,337	153,337	

Town of Needham
Capital Improvement Plan
January 2018

Vehicle to be Replaced	Dept	FY2019 Department Request Last Year	FY2019 Department Request This Year	FY2020 Department Request Last Year	FY2020 Department Request This Year	FY2021 Department Request Last Year	FY2021 Department Request This Year	FY2022 Department Request Last Year	FY2022 Department Request This Year	FY2023 Department Request NEW
Replace Unit 17 Ford F550	200			73,233					78,449	
Replace Unit 19 INTERNATIONAL 7400 Series	200			239,000					256,023	
Replace Unit 37 INTERNATIONAL 7500 Series	200							441,303	441,303	
Replace Unit 101 CASE LOADER	200							202,621	202,621	
Replace Unit 25 Ford F450	300							71,066	84,163	
Replace Unit 30 Ford F550	300			73,233					78,449	
Replace Unit 40 Ford F350	300							62,148	62,148	
Replace Unit 712 Ford Econ Van E250	23.2					49,575			40,247	
Replace Unit 756 Ford F150	23.2			34,783					37,260	
Replace Unit 404 Ford E350 VAN	25							100,240	100,240	
Replace Unit Van 9 TOYOTA SIENNA	21							37,725	54,079	
Replace Unit Van 10 TOYOTA SIENNA	21							37,725	54,079	
Replace Unit 108 TRACKLESS TRACTOR	23.5									206,164
Replace Unit 112 Prinoth	23.5									206,618
Replace Unit 5 INTERNATIONAL 7400 Series	100									264,984
Replace Unit 11 FORD EXPLORER	200									42,558
Replace Unit 35 INTERNATIONAL 4900 Series	300									
Replace Unit 700 Ford Econ Van E250	23.2					38,886				41,656
Replace Unit 452 Ford Taurus	14	35,758								41,034
Replace Unit HAZ HAZMAT TRAILER	18									

Town of Needham
Capital Improvement Plan
January 2018

Vehicle to be Replaced	Dept	FY2019 Department Request Last Year	FY2019 Department Request This Year	FY2020 Department Request Last Year	FY2020 Department Request This Year	FY2021 Department Request Last Year	FY2021 Department Request This Year	FY2022 Department Request Last Year	FY2022 Department Request This Year	FY2023 Department Request NEW
Replace Unit Bus 1 BLUE BIRD 303 SCHOOL BUS	21									96,693
Replace Unit Bus 2 BLUE BIRD 303 SCHOOL BUS	21									96,693
		\$2,252,146	\$2,968,440	\$1,943,144	\$1,587,898	\$521,855	\$694,676	\$1,911,160	\$2,037,020	\$996,399

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Police cruiser radio replacement **Fiscal Year:** 2021

Purpose:	Acquisition	Classification:	Equipment	Status:	Amended Request from the Prior CIP
Department:	Police			Supports:	Public Safety
Partners:				Useful Life:	More than twelve (12) years

Parameters

Response

1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	No
6. If funded, will additional permanent staff be required?	Total New FTE's: No
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost: **\$93,351** How was the Project Cost Determined: In-House Estimate

Budget Impact:

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$0							
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$0							
Construction Management	\$0							
Equipment	\$93,351		\$0	\$93,351				
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$93,351	\$0	\$0	\$93,351	\$0	\$0	\$0	\$0

Capital Project Request

Project Title: Police cruiser radio replacement

Fiscal Year: 2021

\$0

Project Description and Considerations

The current police cruiser radio system has been in service for over nine years. This is the primary communication tool between the officers in the field and the police dispatch center. The eighteen radios are Motorola Astro Spectra series which are now discontinued by the manufacturer. While we currently do not have service agreements for the cruiser radios due to age of the radios, replacement parts will be increasingly difficult to acquire in the future. With this in mind, the department is proposing to replace 20 cruiser radios with a compatible radio system in FY 2021. At that time, these units will have been in service for fourteen years, which would be the end of their useful life cycle. The increase of \$191.88 per unit over FY18 is quoted from the new state contract ITT57 MA State. This pricing reflects replacing our current fleet radios with the newer model.

In last years submission the cruiser radio replacment was scheduled for FY 2019. Currently we are in the process of a communications study in conjunction with the New Public Safety Building study. I want to suggest waiting to see what the outcome of the communication study and public safety building before purchasing new cruiser radios to ensure compatibility.

The increase in price also reflects the increase of radios from 18 to 20. The first addition is to add a radio to the travel car which currently is not equipped with one. The second radio is to be installed in a detective vehicle that was added to the fleet.

Supplemental Information

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Police Department Firearm Replacement **Fiscal Year:** 2020

Purpose:	Acquisition	Classification:	Equipment	Status:	Same Request from the Prior CIP
Department:	Police			Supports:	Public Safety
Partners:				Useful Life:	More than eight (8) years

Parameters	Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	No
6. If funded, will additional permanent staff be required?	No
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	yes
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	no
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	\$31,000	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$0							
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$0							
Construction Management	\$0							
Equipment	\$26,000		\$26,000					
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$5,000		\$5,000					
TOTAL	\$31,000	\$0	\$31,000	\$0	\$0	\$0	\$0	\$0

Capital Project Request

Project Title: Police Department Firearm Replacement

Fiscal Year: 2020

\$0

Project Description and Considerations

The current service weapon of the Police Department is a Smith and Wesson M&P 40 caliber. The weapon is outfitted with night sights and has a 15 round capacity in each magazine. The current weapon was placed into service in 2009, replacing a weapon that was in service for eight years. Based on a study conducted by the FBI and research done by our firearms instructors we would replace the Smith and Wesson 40 caliber with a 9MM firearm (make and model to be determined). The cost includes the purchase of the new firearm and holsters . The other expense (\$5000.) is for the purchase of new 9mm ammunition. The department intends to purchase 52 weapons.

Supplemental Information

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Police use of Force Simulator **Fiscal Year:** 2019

Purpose:	Acquisition	Classification:	Equipment	Status:	Amended Request from the Prior CIP
Department:	Police			Supports:	Public Safety
Partners:	IT			Useful Life:	More than eight (8) years

Parameters

Response

1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	Yes
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	No
6. If funded, will additional permanent staff be required?	No
Total New FTE's:	
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost: **\$47,000** How was the Project Cost Determined: Industry References

Budget Impact: Negligible impact on the annual operating expenses less than \$5,000

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$0							
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$0							
Construction Management	\$0							
Equipment	\$47,000	\$47,000						
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$47,000	\$47,000	\$0	\$0	\$0	\$0	\$0	\$0

Capital Project Request

Project Title: Police use of Force Simulator

Fiscal Year: 2019

\$0

Project Description and Considerations

This request is for a comprehensive interactive Use-Of-Force training simulator which will provide a platform for realistic, stress-induced training. The system provides scenarios that enhance marksmanship skills, but more importantly, they improve an officer's decision-making skills and the appropriate selection of force used. The simulator provides trainees with the ability to practice posture, verbalization, soft hand skills, impact weapons, chemical spray and lethal force. They also provide a means for officers to practice skills in de-escalating a situation. Each trainee's scenario and reactions can be analyzed and then reviewed for training purposes. The system is portable and can be easily customized to meet the needs of the agency. The benefit of having an effective, realistic training program is to enhance public safety as well as reduce liability risks.

This is amended from last year in two areas;

1. FY change from 2021 to 2019. This change is a result of the cruiser radio change, and the need to provide interactive use of force training
2. The cost has increased from \$45,000 to \$47,000. This is due to the addition of the purchase of 2 taser related training tools that were not included in the prior submission

Supplemental Information

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Replacement of AED (Automated External Deffibrillators) **Fiscal Year:** 2023

Purpose:	Acquisition	Classification:	Equipment	Status:	New Request
Department:	Police			Supports:	Public Safety
Partners:	N/A			Useful Life:	More than twelve (12) years

Parameters

Response

1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	No
6. If funded, will additional permanent staff be required?	Total New FTE's: No
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	Yes
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	\$27,832	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$0							
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$0							
Construction Management	\$0							
Equipment	\$23,940	\$0				\$23,940		
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$3,892	\$0				\$3,892		
TOTAL	\$27,832	\$0	\$0	\$0	\$0	\$27,832	\$0	\$0

Capital Project Request

Project Title: Replacement of AED (Automated External Deffibrillators)

Fiscal Year:

2023

\$0

Project Description and Considerations

This purchase is to replace all of the current AED equipment. Some of the current equipment in use is sixteen years old and at the end of the useful life cycle. We intend to purchase the same model that is carried by the Needham Fire Department allowing the equipment to be interchangeable when fire personel arrive.

Othe expenses of \$3892.00 is to purchase 12 Hard Shell, watertight carrying cases and one training unit.

Supplemental Information

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request										
Project Title: Ongoing Personal Protective Equipment, PPE ("bunker gear") Replacement Program							Fiscal Year: 2019			
Purpose:	Acquisition	Classification:	Equipment	Status:	Amended Request from the Prior CIP					
Department:	Fire			Supports:	Public Safety					
Partners:	Board of Selectmen; Finance Committee			Useful Life:	More than eight (8) years					
Parameters							Response			
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							No			
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?							No			
3. Does this project require any permitting by any Town or State agency?							No			
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?							No			
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?							No			
6. If funded, will additional permanent staff be required?							Total New FTE's:			No
7. If funded, will the operating budget need to be increased to cover operating expenses?							No			
8. If funded, will this project lower the requesting Department's operating costs?							No			
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?							No			
10. If the project is NOT funded, will current Town revenue be reduced?							No			
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No			
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							No			
13. Is this a request in response to a Court, Federal, or State order?							No			
14. Is this a request in response to a documented public health or safety condition?							No			
15. Is this a request to improve or make repairs to extend the useful life of a building?							No			
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							No			
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No			
18. Will any other department be required to provide assistance in order to complete the project?							No			
19. If funded, will this project increase the operating expense for any other department?							No			
Project Cost:	\$303,968	How was the Project Cost Determined:		In-House Estimate						
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000									
Project Budget Elements		Project Budget	2019	2020	2021	2022	2023	2024	2025	
Planning/Feasibility		\$0								
Design/Engineering		\$0								
Land/ROW Acquisition		\$0								
Site Preparation		\$0								
Construction		\$0								
Construction Management		\$0								
Equipment		\$303,968	\$43,424	\$43,424	\$43,424	\$43,424	\$43,424	\$43,424	\$43,424	
Furniture, Fixtures, and Equipment		\$0								
Technology Hardware/Software		\$0								
Other Expenses		\$0								
TOTAL		\$303,968	\$43,424	\$43,424	\$43,424	\$43,424	\$43,424	\$43,424	\$43,424	

\$0

Capital Project Request

Project Title: Ongoing Personal Protective Equipment, PPE ("bunker gear") Replacement Program

Fiscal Year:

2019

Project Description and Considerations

This request is to replace Personal Protective Equipment, PPE ("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. Ensembles issued prior to the recent purchase of a second set of PPE are approaching this time frame for many of our members. Fortunately, with the number of recent and forthcoming new hires, about a third of the Department have been issued PPE within the past 5 years. All fire personnel are in the process of being issued a second set of PPE allowing them to properly maintain this equipment in a healthy manner.

In FY 2018 a request was approved for the purchase of a second set of Personal Protective Equipment, PPE ("bunker gear") for all fire line personnel. The PPE requested includes boots, firefighting pants and coat. Our firefighting personnel regularly work in highly toxic environments caused by spills, chemical releases and the products of combustion. Numerous studies have found the number of carcinogens and other toxins associated with the fire ground to be extremely high. Further, the toxicity of these carcinogens appears to be much greater and more concentrated today, due to the wide spread use of synthetic and petroleum based building materials and furnishings found in modern construction. These unhealthy contaminants, chemicals, toxins and carcinogens adhere to our firefighter's "bunker gear", thus creating a lingering exposure concern for not only the firefighters, but to members of the public they serve, as they respond to calls for service. Recent research by NIOSH, CDC, National Fallen Firefighters Foundation and others clearly points to the increased risks of cancer due to firefighters wearing contaminated PPE adds to this risk. The following links may be helpful in understanding this research:

<http://firefightercancersupport.org/wp-content/uploads/2013/08/Taking-Action-against-Cancer-in-the-Fire-Service.pdf>

<http://www.cdc.gov/niosh/firefighters/ffCancerStudy.html>

<http://www.everyonegoeshome.com/wp-content/uploads/sites/2/2016/03/Cancer-Alliance-January-2015.pdf>

<http://www.cdc.gov/niosh/pgms/worknotify/pdfs/ff-cancer-factsheet-final.pdf>

Ignoring such research could be considered to negligent going forward.

Our Department has taken additional measures to help reduce the risk of cancer, including outfitting each piece of apparatus with after action wipes to quickly remove carcinogens from responders skin while still in the field. However, current safety practices dictate that firefighters be issued two sets of PPE, so that once contaminated the equipment can be washed in extractors and dried in dryers designed specifically for that purpose. Maintaining a second set of PPE allows for contaminated equipment to be washed and dried properly, while allowing personnel to remain available to respond to calls. Research has found that wet PPE creates a breeding ground for unhealthy bacteria, as well, which is also harmful.

Fulfillment of this request will be greatly beneficial to the health and wellness of our personnel and the public we serve. In doing so, the exposure to occupational carcinogens will be reduced with the potential for a reduction in the number of our members contracting cancer from the work place. In turn, this could result in a corresponding reduction in cancer related disability pensions saving funds in the future.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Asa Small Field Renovation **Fiscal Year:** 2020

Purpose:	Design/Engineering	Classification:	Infrastructure	Status:	Amended Request from the Prior CIP
Department:	Public Works - Parks and Forestry			Supports:	Culture and Leisure
Partners:	Park and Recreation, Needham Youth Sports Groups			Useful Life:	More than twenty-five (25) years

Parameters **Response**

1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	No
6. If funded, will additional permanent staff be required?	Total New FTE's: 0 No
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	Yes
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	\$186,000	How was the Project Cost Determined:	Hired Consultant
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$34,000		\$34,000					
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$152,000			\$152,000				
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$186,000	\$0	\$34,000	\$152,000	\$0	\$0	\$0	\$0

\$0

Capital Project Request

Project Title: Asa Small Field Renovation

Fiscal Year: 2020

Project Description and Considerations

This project will address field deficiencies on the Asa Small ball diamond at the DeFazio complex. The project will include striping, regrading, amending soils, a new baseball skin surface, and a new irrigation system. The field conditions were not addressed as part of the Field of Dreams project. This project may include additional amenities funded by user groups including field lights, a score board, bleachers, and a larger batting cage.

DPW and the Parks and Forestry Division did a thorough review of their workload over the next five years in order to prioritize their schedule based on the volume of projects and their timing. Due to this review, it has been decided this project is going to be pushed back a year. This additional time will also allow the Division to work with the user groups to identify any value added items.

3. This project may require permitting from the Conservation Commission, Planning Board, Zoning Board of Appeals, and Building Department.

12. This project may be eligible for Community Preservation funds under Recreation.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request									
Project Title: Athletic Facility and Public Recreation Improvements						Fiscal Year: 2019			
Purpose:	Construction	Classification:	Infrastructure	Status:	Amended Request from the Prior CIP				
Department:	Public Works - Parks and Forestry			Supports:	Culture and Leisure				
Partners:	Park and Recreation			Useful Life:	More than twelve (12) years				
Parameters								Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?								No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?								No	
3. Does this project require any permitting by any Town or State agency?								Yes	
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?								No	
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?								No	
6. If funded, will additional permanent staff be required?						Total New FTE's:	0	No	
7. If funded, will the operating budget need to be increased to cover operating expenses?								No	
8. If funded, will this project lower the requesting Department's operating costs?								No	
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?								No	
10. If the project is NOT funded, will current Town revenue be reduced?								No	
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?								No	
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?								Yes	
13. Is this a request in response to a Court, Federal, or State order?								No	
14. Is this a request in response to a documented public health or safety condition?								No	
15. Is this a request to improve or make repairs to extend the useful life of a building?								No	
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?								No	
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?								No	
18. Will any other department be required to provide assistance in order to complete the project?								Yes	
19. If funded, will this project increase the operating expense for any other department?								No	
Project Cost:	\$5,276,500	How was the Project Cost Determined:			Hired Consultant				
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000								
Project Budget Elements		Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility		\$0							
Design/Engineering		\$214,500	\$55,000		\$52,500	\$107,000			
Land/ROW Acquisition		\$0							
Site Preparation		\$0							
Construction		\$5,062,000	\$510,000	\$2,880,000		\$570,000	\$1,102,000		
Construction Management		\$0							
Equipment		\$0							
Furniture, Fixtures, and Equipment		\$0							
Technology Hardware/Software		\$0							
Other Expenses		\$0							
TOTAL		\$5,276,500	\$565,000	\$2,880,000	\$52,500	\$677,000	\$1,102,000	\$0	\$0

\$0

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Athletic Facility and Public Recreation Improvements

Fiscal Year:

2019

Project Description and Considerations

The Department of Public Works and Park and Recreation have developed a maintenance plan for all fields, which includes new construction, total reconstruction, partial renovation, irrigation, drainage improvements, and equipment replacement or repair (bleachers, fences/backstops, player benches, and miscellaneous equipment) for multi-use fields and ball diamonds.

FY19

Claxton Field: Upgrade field lighting system to more energy efficient lights

Construction \$510,000

The costs for Claxton Field upgrades have increased due to the original cost estimate not being inclusive of installation.

Turf Field Replacement at DeFazio Field & Memorial Park: remove the existing turf carpet, regrade, and install new artificial field turf

Design \$55,000

The costs for the design of the turf field replacement at DeFazio and Memorial Park decreased as a result of a quote from a prequalified consultant.

FY20

Turf Field Replacement at DeFazio Field & Memorial Park: remove the existing turf carpet, regrade, and install new artificial field turf

Construction \$2,500,000

Cricket Field: Drainage and field renovation for Field #2, irrigation renovation for both fields

Construction \$380,000

The construction of the Cricket Field drainage and field renovation for field #2 is being pushed back to FY20, pending the completion of the design. The increase in costs was originally disclosed in early 2017 and is being explored through the design process.

FY21

McLeod Field: repair drainage, amend soils, and install new sod

Design \$35,000

Claxton: Softball Skin Renovation Fields 1 & 2

Design \$17,500

FY22

McLeod Field: repair drainage, amend soils, and install new sod

Construction \$450,000

Claxton: Softball Skin Renovation Fields 1 & 2

Construction \$120,000

Renovation of fields at Eliot and Broadmeadow; remediate drainage issues at Broadmeadow

Design \$107,000

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Athletic Facility and Public Recreation Improvements

Fiscal Year:

2019

FY23

Renovation of fields at Eliot and Broadmeadow; remediate drainage issues at Broadmeadow

Construction \$1,102,000

ADDITIONAL FUTURE PROJECTS:

Needham Heights Common Renovation

Design of sidewalks, irrigation, landscape improvements, hardscape, electrical and lighting, park benches

Avery Field

Improve parking (DPW road project) after the new Fire Station is constructed

DeFazio Complex

Install walking path with protective netting to DeFazio #1

High Rock Fields

New backstop, player benches, perimeter fencing

DeFazio Tot Lot

Improve fencing

Charles River Water Treatment Plant

Mitigation of red pines tree stand in the well fields

Hillside and Mitchell

Renovation of fields

Nike, Ridge Hill, and Hillside

Construction of new athletic fields

3. Conservation Commission permitting can be satisfied by preparing the pipe and installing hay bales and sedimentation barriers; Planning Board filing may be required.

12. All items except for Turf Fields are eligible for Community Preservation Funds.

18. The Department of Public Works will be partnering with Park and Recreation on each of these projects.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request									
Project Title: DPW Central Ave. Storage Facility					Fiscal Year: 2019				
Purpose:	Design/Engineering	Classification:	Building	Status:	New Request				
Department:	Public Works - Highway			Supports:	Other (see below for information)				
Partners:	Public Works, PPBC			Useful Life:	More than twenty-five (25) years				
Parameters								Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?								No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?								No	
3. Does this project require any permitting by any Town or State agency?								Yes	
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?								No	
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?								Yes	
6. If funded, will additional permanent staff be required?						Total New FTE's:	0	No	
7. If funded, will the operating budget need to be increased to cover operating expenses?								No	
8. If funded, will this project lower the requesting Department's operating costs?								No	
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?								No	
10. If the project is NOT funded, will current Town revenue be reduced?								No	
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?								No	
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?								No	
13. Is this a request in response to a Court, Federal, or State order?								No	
14. Is this a request in response to a documented public health or safety condition?								No	
15. Is this a request to improve or make repairs to extend the useful life of a building?								No	
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?								No	
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?								No	
18. Will any other department be required to provide assistance in order to complete the project?								Yes	
19. If funded, will this project increase the operating expense for any other department?								No	
Project Cost:	\$7,900,000	How was the Project Cost Determined:			Hired Consultant				
Budget Impact:	May increase annual operating expenses by more than \$100,000								
Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025	
Planning/Feasibility	\$0								
Design/Engineering	\$650,000	\$650,000							
Land/ROW Acquisition	\$0								
Site Preparation	\$0								
Construction	\$7,250,000	\$7,250,000							
Construction Management	\$0								
Equipment	\$0								
Furniture, Fixtures, and Equipment	\$0								
Technology Hardware/Software	\$0								
Other Expenses	\$0								
TOTAL	\$7,900,000	\$7,900,000	\$0	\$0	\$0	\$0	\$0	\$0	
\$0									

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: DPW Central Ave. Storage Facility

Fiscal Year:

2019

Project Description and Considerations

This request is for the Design/Engineering of the DPW Central Avenue Storage Facility.

The storage facility will address the needs of a modernized DPW facility and organization, including providing shelter for Town equipment which will increase the service life. Due to the construction of the Public Service Administration Building adjacent to the main DPW facility and water building, a significant amount of storage area for the DPW was sacrificed. Currently, materials that were displaced are being stored throughout Town in less than optimal conditions. With the additional proposed build out of the main DPW facility at 470 Dedham Avenue, including the relocation of the fuel island, even more laydown and staging space has been lost.

The DPW developed a comprehensive vehicle and equipment list, including towed, ride-on, and small portable equipment along with classified storage type (i.e. garaged vs. covered), and presented equipment storage scenarios based on the season.

The FY19 request for Design/Engineering funds has increased due to:

- Increased heated space.
- Preferred location, factoring in RTS operations.
- Market adjustments.
- Additional escalation.

FY19

Design/Engineering \$650,000

The Department plans to request Construction funds at the FY19 Special Town Meeting. The work would take place from February through October 2019.

FY19 STM

Construction \$7,250,000

This request supports public safety, the transportation network, and utilities.

3. A building permit will be required. Conservation Commission permitting may also be required.
5. This request for a new building is supported by the Building Maintenance division.
18. The PPBC and DPW will be required to provide assistance in order to complete the project.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request									
Project Title: DPW Complex					Fiscal Year: 2020				
Purpose:	Design/Engineering	Classification:	Building	Status:	Informational Only Details Incomplete				
Department:	Public Works - Highway			Supports:	Other (see below for information)				
Partners:	PPBC			Useful Life:	More than twenty-five (25) years				
Parameters								Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?								Yes	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?								Yes	
3. Does this project require any permitting by any Town or State agency?								Yes	
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?								Yes	
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?								Yes	
6. If funded, will additional permanent staff be required?						Total New FTE's:	1.5	Yes	
7. If funded, will the operating budget need to be increased to cover operating expenses?								Yes	
8. If funded, will this project lower the requesting Department's operating costs?								No	
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?								No	
10. If the project is NOT funded, will current Town revenue be reduced?								No	
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?								No	
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?								No	
13. Is this a request in response to a Court, Federal, or State order?								No	
14. Is this a request in response to a documented public health or safety condition?								No	
15. Is this a request to improve or make repairs to extend the useful life of a building?								Yes	
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?								No	
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?								No	
18. Will any other department be required to provide assistance in order to complete the project?								Yes	
19. If funded, will this project increase the operating expense for any other department?								No	
Project Cost:	\$37,950,000	How was the Project Cost Determined:			Hired Consultant				
Budget Impact:	May increase annual operating expenses between \$5,001 and \$25,000								
Project Budget Elements		Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility		\$0							
Design/Engineering		\$2,950,000		\$2,950,000					
Land/ROW Acquisition		\$0							
Site Preparation		\$35,000,000				\$35,000,000			
Construction		\$0							
Construction Management		\$0							
Equipment		\$0							
Furniture, Fixtures, and Equipment		\$0							
Technology Hardware/Software		\$0							
Other Expenses		\$0							
TOTAL		\$37,950,000	\$0	\$2,950,000	\$0	\$35,000,000	\$0	\$0	\$0
<div style="display: flex; justify-content: space-between;"> \$0 </div>									

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: DPW Complex

Fiscal Year:

2020

Project Description and Considerations

The Public Services Administration Building (PSAB, 500 Dedham Ave) was occupied by the DPW in November 2011, eliminating the space problems and air quality issues experienced on the second floor of the DPW Operations Building (470 Dedham Ave). However, deficiencies continue to exist throughout the building internally and the DPW site externally. The poor condition of the current building, unmet equipment and vehicle storage, and stormwater quality issues require a solution. Ultimately, the expansion and renovation of the DPW Operations Building (470 Dedham Ave) and site, referred to as DPW Phase II, will be required to address the need for stormwater quality mitigation as well as storage and maintenance considerations.

In 2006, the DPW was made aware that municipal DPW facilities were no longer exempt from National Pollutant Discharge Elimination System (NPDES) stormwater requirements regulating public works facilities under the Federal Highway Act. All municipal DPW facilities are now required to comply with stormwater and wastewater discharge requirements (quality). In 2009, Town Meeting approved \$42,000 for engineering and design for stormwater quality improvements on a portion of the DPW site.

In FY15, Town Meeting approved \$40,000 for a feasibility study for the appropriate location(s) for a facility to provide the various DPW services. This study will evaluate the current facility and other options for the location of various DPW operations. The current DPW building is over 50 years old. To continue using this facility, the major building systems including electrical, plumbing, and HVAC require replacement as well as a structural upgrade for seismic events. The feasibility study resolving these issues may involve the relocation of DPW services, renovation of the existing building, replacing the existing building, and providing other services in different locations throughout Town. The final result will address the needs of a modernized DPW facility and organization, including providing shelter for Town equipment which will increase the service life, and resolve any existing stormwater and wastewater management issues at the current location.

FY20

DPW Facility

Design/Engineering \$2,950,000

FY21

No funding request

FY22

DPW Facility

Construction \$35,000,000

Capital Project Request

Project Title: DPW Complex

Fiscal Year:

2020

Supplemental Information

This request supports culture and leisure, public safety, transportation network and utilities.

1. The cost to construct off-site storage will be made under a separate request.
2. There are costs for technology, maintenance etc. that may not be included in this request.
3. Conservation Commission permitting may be required. Building permit may be required.
4. Technology will be necessary for a DPW Facility.
5. This request is for a DPW Facility.
6. It may facilitate the addition of maintenance staff.
7. There may be additional expenses to maintain the building.
15. This will be to extend the useful life of the DPW Facility.
18. This will require input from all fuel users, technology, facilities construction and operations.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request									
Project Title: DPW Specialty Equipment						Fiscal Year: 2019			
Purpose:	Acquisition	Classification:	Equipment	Status:	Amended Request from the Prior CIP				
Department:	Public Works - Garage			Supports:	Transportation Network				
Partners:				Useful Life:	More than eight (8) years				
Parameters								Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?								No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?								No	
3. Does this project require any permitting by any Town or State agency?								No	
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?								No	
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?								No	
6. If funded, will additional permanent staff be required?						Total New FTE's:	0	No	
7. If funded, will the operating budget need to be increased to cover operating expenses?								No	
8. If funded, will this project lower the requesting Department's operating costs?								No	
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?								No	
10. If the project is NOT funded, will current Town revenue be reduced?								No	
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?								No	
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?								No	
13. Is this a request in response to a Court, Federal, or State order?								No	
14. Is this a request in response to a documented public health or safety condition?								No	
15. Is this a request to improve or make repairs to extend the useful life of a building?								No	
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?								No	
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?								No	
18. Will any other department be required to provide assistance in order to complete the project?								No	
19. If funded, will this project increase the operating expense for any other department?								No	
Project Cost:	\$369,500	How was the Project Cost Determined:			Industry References				
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000								
Project Budget Elements		Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility		\$0							
Design/Engineering		\$0							
Land/ROW Acquisition		\$0							
Site Preparation		\$0							
Construction		\$0							
Construction Management		\$0							
Equipment		\$369,500	\$76,500	\$90,000	\$163,000	\$40,000			
Furniture, Fixtures, and Equipment		\$0							
Technology Hardware/Software		\$0							
Other Expenses		\$0							
TOTAL		\$369,500	\$76,500	\$90,000	\$163,000	\$40,000	\$0	\$0	\$0
\$0									

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: DPW Specialty Equipment

Fiscal Year:

2019

Project Description and Considerations

This request is for all large equipment that fits the definition of capital but is not included in the rolling stock. These pieces of equipment are not plated. The Town received an updated quote and increased its funding request for FY20.

FY19

Unit #344 Parks & Forestry

Specialty Mower: large machine that performs second cut on highly maintained multipurpose athletic fields

Equipment \$76,500

FY20

Unit #351 Parks & Forestry

Tractor: multi-use utility equipment

Equipment \$90,000

FY21

New piece of Highway equipment

Loader mounted snow blower: clears gutter lines, parking lots, loading trucks

Equipment \$163,000

FY22

Unit #334 Parks & Forestry

Specialty Mower: small machine that performs second cut on highly maintained baseball fields

Equipment \$40,000

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Permanent Message Boards **Fiscal Year:** 2020

Purpose:	Acquisition	Classification:	Technology	Status:	Amended Request from the Prior CIP
Department:	Public Works - Engineering			Supports:	General Government
Partners:	Town Manager's Office, ITC			Useful Life:	More than eight (8) years

Parameters **Response**

1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	Yes
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	No
6. If funded, will additional permanent staff be required?	Total New FTE's: 0 No
7. If funded, will the operating budget need to be increased to cover operating expenses?	Yes
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	Yes
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	Yes
18. Will any other department be required to provide assistance in order to complete the project?	Yes
19. If funded, will this project increase the operating expense for any other department?	Yes

Project Cost:	\$220,000	How was the Project Cost Determined:	Current Contract
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$0							
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$220,000		\$52,000	\$54,000	\$56,000	\$58,000		
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$220,000	\$0	\$52,000	\$54,000	\$56,000	\$58,000	\$0	\$0

\$0

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Permanent Message Boards

Fiscal Year:

2020

Project Description and Considerations

In support of the Board of Selectmen's goals, this request is for up to seven permanently installed message boards to communicate with residents. This will alleviate competition for the current message boards. The new message boards will have the capacity to be programmed remotely and simultaneously from a Town work station or a laptop. There will be minimal operating costs, including a data plan to allow for remote updates and electricity for each location.

Currently the Public Works Department has three mobile message boards that are used for large construction projects. These message boards are removed from construction projects and relocated to various sites in Town when requested for non-construction notifications to residents and commuters. The existing message boards are difficult to maneuver, time consuming to program, and often not available for non-emergency notices.

At the May 2014 Annual Town Meeting, funding was approved for a Permanent Message Board pilot program at the RTS. This message board was installed in the Spring of 2016. The Town is presently piloting the use of the board and has decided to delay an additional year before requesting funding for more boards.

The increase in cost from the prior year's submission is a reflection of the actual costs of the board, which include the double sided board that the Town opted for, and the stone wall that serves both an aesthetic and a structural function.

FY20

One Message Board at Dedham St. and South St.

Construction \$52,000

FY21

One Message Board at Central Avenue at Great Plain Avenue

Construction \$54,000

FY212

One Message Board at the Public Safety Building, School Street and Chestnut Street

Construction \$56,000

FY23

One Message Board at Fire Station #2

Construction \$58,000

FY24

One Message Board at Greendale Avenue at Great Plain Avenue

3. Conservation Commission permitting may be required for some locations. Depending on the location, a building permit and Design Review Board Approval may be required.
4. ITC will be adding new message boards to existing software for programming.
7. There will be minimal operating costs for these boards which include cellular service for remote programming and electricity.
16. These message boards will be permanently installed at the chosen locations.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Public Works Infrastructure Program **Fiscal Year:** 2019

Purpose:	Construction	Classification:	Infrastructure	Status:	Amended Request from the Prior CIP
Department:	Public Works - Highway			Supports:	Transportation Network
Partners:				Useful Life:	More than twelve (12) years

Parameters **Response**

1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	No
6. If funded, will additional permanent staff be required?	Total New FTE's: 0 No
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	Yes
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No
19. If funded, will this project increase the operating expense for any other department?	Yes

Project Cost:	\$9,906,500	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$556,000	\$203,500		\$83,000		\$269,500		
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$9,350,500	\$1,570,000	\$1,985,500	\$2,237,000	\$2,022,000	\$1,536,000		
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$9,906,500	\$1,773,500	\$1,985,500	\$2,320,000	\$2,022,000	\$1,805,500	\$0	\$0

\$0

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Public Works Infrastructure Program

Fiscal Year:

2019

Project Description and Considerations

The Public Works Infrastructure Program 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. Each program is detailed below.

Street Resurfacing:

This program is essential to improve the structural and surface integrity of the Town's approximately 279 lane miles of accepted streets. The Town targets 17 lane miles per year to get a desired life cycle of 15 to 20 years. The primary strategy of this program is asphalt paving and incidental work. Incidental work may include asphalt berm curb, new grass shoulders, corner reconstruction including handicapped ramps, minor drainage improvements, street sign replacement, traffic markings, and signs.

Applying this repair strategy in a timely manner will extend the useful life of the roadway for up to 15 years. Installing a monolithic asphalt berm curb better defines the edge of the road, improves drainage, and protects the shoulder from erosion.

The Town targets roads with a Pavement Condition Index (PCI) of below 70 for resurfacing or specialized treatment. The Town targets a PCI of 60 or below for repair/renovation. The Town's goal is to maintain its roadway network at an average PCI rating of 75.

The cost per lane mile for resurfacing in FY18 is \$77,000 or more per lane mile. A basic asphalt overlay at 1.5 inches with asphalt berm curb and casting adjustments is \$59,000 per lane mile.

The average useful life for asphalt paving is 15 years.

FY19 - \$820,000

FY20 - \$840,500

FY21 - \$862,000

FY22 - \$884,000

FY23 - \$906,000

Traffic Signal & Intersection Improvements:

The costs are estimated by Engineering and require conceptual scope of work for project level costs that have not yet been determined. This program will fund traffic signal improvements, intersection improvements, and new traffic signal installations where none currently exist. The design for Highland Avenue at West Street was not completed prior to submission of this CIP and the construction has been pushed out to FY21. In FY19, DPW will evaluate intersection prioritization for future projects

FY21

Highland Avenue at West Street

Construction \$575,000

FY23

Central Avenue at Great Plain Avenue

Design/Engineering \$166,000

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Public Works Infrastructure Program

Fiscal Year:

2019

Supplemental Information

Future Projects:

Central Avenue at Great Plain Avenue Construction
Great Plain Avenue at Greendale Avenue
Kendrick Street at Third Avenue
Kendrick Street at Fourth Avenue

Sidewalk Program:

This program requires funding for the Town to address the failing network of sidewalks throughout the community. There are over 130 miles of accepted sidewalks in Needham. Over half of the Town's sidewalks do not comply with current standards and require significant improvements including the installation of handicapped ramps. Sidewalk improvements must comply with Federal and State laws and construction standards. The cost for sidewalk rehabilitation and reconstruction can vary significantly. Current estimates have identified over \$20,000,000 in backlogged sidewalks in need of repair.

FY18 contract pricing to reconstruct one mile of asphalt sidewalk with incidental costs is estimated to be **\$232,320 per mile (\$44.00/lf)**. Contract pricing to install a mile of granite curb with minor drainage improvements and incidental costs is estimated to be **\$274,560 per mile (\$52.00/lf)**. These costs do not include engineering, design, tree removal and replacement, major drainage improvements, or major public or private property adjustments.

The Town conducted a study with funding from FY16 to analyze and make recommendations about the Town's existing sidewalk infrastructure. The conclusions of that study identified 80 miles of sidewalk in a condition that would warrant reconstruction. The current funding for FY19 was increased over the prior year's submission to begin addressing this deficiency.

FY19 - \$500,000
FY20 - \$512,500
FY21- \$525,000
FY22 - \$540,000
FY23 - \$555,000

Storm Drain Capacity Improvements:

This program provides funding to improve roadway drainage capacity. The March 2002 Stormwater Master Plan identified a number of areas throughout Needham where improvements are required to resolve existing problems with flooding and illicit discharge. Locations for improvements have been prioritized within the plan. This funding request also includes, but is not limited to, the installation of additional storm drains and the replacement and extension of drains on Manning Street, Hoover Road, Concord Road, and Burnside Road with larger capacity drains. Since the issuance of the 2002 Stormwater Master Plan, numerous multi-unit developments have been built or planned in the Town. These developments include new roads with drainage structures and roof or sump connections that are then connected to existing Town systems. These new connections have increased the load on the Town's drainage system and caused flooding in some areas.

Due to extensive drainage repairs that were required on Greendale Ave, funds for FY18 were diverted from Ardmore Road and Hunnewell Street to complete the work, and this project is being requested again for FY19.

FY19

Ardmore Road and Hunnewell Street or Other Prioritized Projects
Design/Engineering \$103,500

FY20

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Capital Project Request

Project Title: Public Works Infrastructure Program

Fiscal Year:

2019

Ardmore Road and Hunnewell Street or Other Prioritized Projects

Construction \$362,500

FY21

Concord Street and Burnside Road or Other Prioritized Projects

Design/Engineering \$83,000

FY22

Concord Street and Burnside Road or Other Prioritized Projects

Construction \$523,000

FY23

TBD or Other Prioritized Projects

Design/Engineering \$103,500

Future areas to be considered, but not yet prioritized:

Carey Road (Area 2)

Lower Hunnewell Street Drainage Improvements, Engineering and Construction

Oak Street (Area 8), Mackintosh Avenue (Areas 3 & 7), Oxbow Road (Area 9), and West Street (Area 11)

Fairfield Street and Elmwood Road (Area 5)

Storm Drain System Repairs:

This program provides funding to repair failing storm drainage infrastructure within Town easements that have been discovered through investigation work. These projects will include the replacement of existing culverts that have deteriorated over time and are restricting flow. This work will eliminate flooding and capacity issues in the immediate vicinity. This project will provide funding over five years for the Drains Division to address small projects related to the Labor Day 2013 storm drainage remediation.

Drainage work on Greendale Avenue was addressed using funding from this portion of the Infrastructure Program. The engineering and construction at 470 South Street has been reassigned to FY19 and FY20.

FY19

470 South Street

Design/Engineering \$100,000

FY20

470 South Street

Construction \$270,000

FY21

TBD (Reserved for projects related to Labor Day 2013 Flooding)

Construction: \$75,000

FY22

TBD (Reserved for projects related to Labor Day 2013 Flooding)

Town of Needham
Capital Improvement Plan
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Capital Project Request

Project Title: Public Works Infrastructure Program

Fiscal Year:

2019

Construction \$75,000

FY23

TBD (Reserved for projects related to Labor Day 2013 Flooding)

Construction \$75,000

Brooks and Culverts – Repair and Maintenance:

It is the intention of the DPW to expend Capital Funds to address the issue of poorly draining brooks, streams, waterways, and culverts throughout the Town that have been severely damaged by heavy rains/storms in the past. Flooding in March 2010 caused the failure of retaining walls, resulting in extensive erosion and silt deposits in brooks and streams. The silt has provided a medium for vegetation and affected the flow of water, and the situation has resulted in the loss of useable abutting property and flooded basements. The current conditions are beyond the means of DPW equipment and personnel. It will require a detailed investigation, a plan of recommended improvements, a design drawing and specifications, environmental permitting, and bidding of construction to be overseen by the Town's Engineering Division. This will return the waterways to a condition that the DPW will be able to maintain.

The Environmental Protection Agency (EPA) is currently finalizing stronger requirements for stormwater and permitting under the NPDES permit. The Town will need to continue to demonstrate its efforts regarding cleaning and improving the water quality of brook and culverts to avoid fines from the EPA.

The Town Engineer and the Water/Sewer/Drains Superintendent have reviewed the existing plan for brook rehabilitation and have determined that based on current conditions, the prioritization should change. The funding that was allocated in FY17 and FY18 will be used to design Meredith Circle area, construct Meadowbrook area, and any remaining funding will be used to address additional portions of Rosemary Brook.

FY19

Meredith Circle

Construction \$250,000

FY20

No Funding Request

FY21

Continued wall repair along Rosemary Brook

Construction \$200,000

FY22

No Funding Request

FY23

No Funding Request

Future Projects include, but are not limited to, the following locations:

Winding River Road

Locust Lane

Fuller Brook Avenue

Oxbow Road

Webster and Howland Streets

Capital Project Request

Project Title: Public Works Infrastructure Program

Fiscal Year:

2019

Brookside Road and Forest Street
Chestnut Street and Carriage Lane
Emerson Place
Pennsylvania Avenue
Elder Road

Roadway Reconstruction:

This request is for full road reconstruction. This differs from the road rehabilitation program, as it requires more complete design and construction. Rehabilitation is similar to a house renovation whereas reconstruction is similar to a knock-down and rebuild. Roads do not just consist of the top layer of asphalt; they are complete systems that have their own foundation. The Town evaluates the sight distance, drainage, handicap ramps, sidewalks, subsurface utilities, public utility poles, and overhead utilities. For this article, the physical conditions of roads to be considered include shape, foundation, and traffic volume. This relates to the nature of how the Town has evolved historically, with roads being constructed as opposed to being designed. This is a multi-year process which requires surveying, designing, utility evaluation, and construction.

Some of the roads that may be targeted for reconstruction include:

Marked Tree Road
Nehoiden Street
Kingsbury Street (received an interim full width overlay patch in CY16)
Sections of Central Avenue
Webster Street from Dedham Avenue to South Street (received an interim full width overlay patch in CY16)

Bridge Repairs:

Surrounded on three sides by the Charles River, the Town jointly maintains a number of bridges with neighboring communities. The Massachusetts Bridge Inspection Program has identified a number of bridges that have some level of deficiency and has recommended repairs. This Program is essential to improve the structural and/or surface integrity of all bridges throughout Needham. Capital Project costs will include surveying, engineering evaluation, design, and repair or reconstruction. Bridges are one of the infrastructure assets whose value and depreciation are now tracked under the GASB 34 Program.

Massachusetts Department of Transportation issued a report on Newell's Bridge which is on Central Avenue to Dover, which indicated that the bridge is deficient and in need of repair. The Town will work with Dover to determine how to address these deficiencies.

Other Bridges (all were recently reconstructed)

Fisher's Bridge, South Street to Dover
Pierce's Bridge, Charles River Street to Dover and South Natick
Kendrick Bridge to Newton

No funding requested at this time.

Guardrail:

Many of the Town's guardrails are noncompliant and the DPW is preparing a plan internally to systematically upgrade existing guardrails to make them both compliant and aesthetically pleasing.

Future projects:

447 Dedham Avenue to Town line
Central Avenue

Town of Needham
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Capital Project Request

Project Title: Public Works Infrastructure Program

Fiscal Year: 2019

Others as determined by DPW, including: Hillside Avenue at Rosemary Street, various locations along Rosemary Street, various locations along Dedham Avenue, High Rock Street at Warren Street, South Street at Dedham Avenue, South Street near Farley Pond Road, Brookline Street at Mitchell School, Greendale Avenue at railroad bridge, Perry Drive, Coulton Park, Harris Avenue, Charles River Street, Central Avenue at Dover town line, multiple locations along Great Plain Avenue, Pilgrim Road, Cartwright Road, Ivy Road, Marshall Street, West Street, Abbott Street, Carter Street, Pershing Road, Chapel Street lot, Oak Knoll Terrace, Blake Street, Highland Avenue near Fire Station #2, Fisher Street near railroad tracks, Parkland Road, and Brookside Road.

3. Conservation Commission permitting may be required for drainage repairs, brooks and culvert repair and roadway reconstruction.

14. The School Safety Committee documented safety issues on Nehoiden Street and Marked Tree Road.

19. A potential increase in electrical costs from traffic signals may require additional budget funds from the Needham Electric Light and Gas Program.

	Street Resurfacing (2.5%/yr)		Traffic Signal & Intersection		Sidewalk Program (2.5%/yr)		Storm Drain Capacity Improvements		Storm Drain System Repair		Brooks & Culverts	Total		
	Engin.	Const.	Engin.	Const.	Engin.	Const.	Engin.	Const.	Engin.	Const.		Engin.	Const.	Total
2019		\$820,000				\$500,000	\$103,500		\$100,000		\$250,000	\$203,500	\$1,570,000	\$1,773,500
2020		\$840,500				\$512,500	\$362,500		\$270,000			\$0	\$1,985,500	\$1,985,500
2021		\$862,000		\$575,000		\$525,000	\$83,000		\$75,000		\$200,000	\$83,000	\$2,237,000	\$2,320,000
2022		\$884,000				\$540,000	\$523,000		\$75,000			\$0	\$2,022,000	\$2,022,000
2023		\$906,000	\$166,000			\$555,000	\$103,500		\$75,000			\$269,500	\$1,536,000	\$1,805,500

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Radio Repeater Building Replacement (Hillcrest Rd.) **Fiscal Year:** 2019

Purpose:	Construction	Classification:	Building	Status:	New Request
Department:	Public Works - Highway			Supports:	Public Safety
Partners:	Police Department, Fire Department, Schools Department, DPW, ITC, HHS, PPBC			Useful Life:	More than twenty-five (25) years

Parameters **Response**

1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	Yes
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	No
6. If funded, will additional permanent staff be required?	Total New FTE's: 0 No
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	Yes
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	Yes
18. Will any other department be required to provide assistance in order to complete the project?	Yes
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	\$136,000	How was the Project Cost Determined:	Hired Consultant
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$18,000	\$18,000						
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$118,000	\$118,000						
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$136,000	\$136,000	\$0	\$0	\$0	\$0	\$0	\$0

\$0

Capital Project Request

Project Title: Radio Repeater Building Replacement (Hillcrest Rd.)

Fiscal Year:

2019

Project Description and Considerations

This request is to replace the failing building at the base of the Birds Hill Water Tower on Hillcrest Road. The building houses radio equipment and related support components for the radios and antennas used by the following departments: Fire, Police, DPW, School Transportation, and Local Emergency Planning Committee (LEPC). The new building will include equipment moved from the existing building, new replacement equipment, and a new back-up generator stored in a separate room for noise control purposes.

The current building, which was built with cement blocks, is deteriorating and has several water leaks in both the walls and the roof. There has also been damage to the building and its contents from animals (rodents). Additionally, the steel entrance door has heavy rust and rot. The Town has not been able to find records of when the structure was built, but it appears it was most likely built in the late 1960s or early 1970s, and has therefore outlasted its useful life.

The Town will also research the possibility of grant funding and other available funding programs.

The current building size is 8'X10' and the proposed replacement building would be 8'X12', placing the back-up power generator in a separate room, as well as allowing for the possibility for future expansion space.

If this building is not replaced or significantly rebuilt, continuing damage to the communications equipment could cause major voids in public safety radio signals and the ability to communicate during emergencies. There is also a concern of electrical problems as a result of water and rodent damage to the electrical wiring in the building.

- 3. Building permits will be required.
- 4. There is technology in the communications building.
- 14. The current building damage compromises the ability to communicate during emergencies.
- 17. This project improves the reliability of the Town's emergency communication network.
- 18. This project involves the Fire Department, Police Department, Schools Department, DPW, Health and Human Services, ITC, and PPBC.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Streetlight Conversion to LED **Fiscal Year:** 2019

Purpose:	Construction	Classification:	Infrastructure	Status:	New Request
Department:	Public Works - Engineering			Supports:	Transportation Network
Partners:	Finance			Useful Life:	More than eight (8) years

Parameters **Response**

1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	No
6. If funded, will additional permanent staff be required?	Total New FTE's: 0
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	Yes
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	Yes
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	Yes
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	\$685,000	How was the Project Cost Determined:	Hired Consultant
Budget Impact:	The project should reduce the operating expenses		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$0							
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$685,000	\$685,000						
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$685,000	\$685,000	\$0	\$0	\$0	\$0	\$0	\$0

\$0

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Streetlight Conversion to LED

Fiscal Year:

2019

Project Description and Considerations

This request is in response to the Streetlight Pilot Program conducted by DPW from May 2017 to July 2017. The Pilot Program tested the existing streetlights against Light Emitting Diodes (LED) streetlights to get the Town residents' input on converting to a more efficient lighting type. The existing lights are High Pressure Sodium (HPS) lights. These were considered the most energy efficient lighting types for their purpose in the early 2000s. Currently, LEDs are considered the more energy efficient streetlighting type. Taking into consideration the Town's Pilot Program, it was determined that converting the streetlights to LED was in the Town's best interest. Of the three LED streetlight models piloted, two received a higher average rating than the existing HPS streetlights by the Town residents who completed the online survey. This included many residents who live on the streets where the Pilot Program was conducted.

The Metropolitan Area Planning Council (MAPC) conducted an estimate for the Town of Needham in 2017 to convert all of the existing Cobrahead streetlights. According to that estimate, the Town has 2,521 existing streetlights that would need to be converted. In addition to the monetary incentive, the Town's energy savings would be approximately 393,296 kWh annually. Depending on funding and implementation schedule, the actual cost to the Town may decrease. Payback does not include anticipated decreases in maintenance costs. LED lights will be warranted for ten years and the only costs for maintenance to the Town will be labor to address any issues, pole transfers, new lights, and the cost of knockdowns.

	Savings/Yr	Costs	Payback
Utility Incentive Only	\$94,578	\$658,255	7.0
Utility Incentive & Grant	\$94,578	\$494,812	5.2

Other Massachusetts towns and cities with comparable streetlight inventories that have participated in the MAPC LED conversion program have secured maintenance contracts valued at an average of \$0.53 per streetlight per year, while Needham currently pays \$14.24 per streetlight per year for its existing streetlight maintenance contract. Though not all Town-owned streetlights are eligible for LED conversion under the MAPC program, total maintenance savings for those that are eligible for conversion could exceed \$30,000 per year.

The MAPC listed out a seven milestone process in order to complete the streetlight conversion project. So far, the Town has completed the first two milestones, which were to contact the electric utility to begin the incentive reservation and to complete a streetlight audit. The next step is to secure funding.

8. It will not decrease DPW's annual operating budget, but it will decrease the Needham Electric, Light, and Gas budget due to energy reduction and reduced maintenance costs.

16. These lights will be permanently installed on the street.

18. Finance will be involved in the process since the budget for the utility costs and maintenance are managed by that Department.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request									
Project Title: Town Common Historic Redesign and Beautification					Fiscal Year: 2020				
Purpose:	Construction	Classification:	Infrastructure	Status:	Amended Request from the Prior CIP				
Department:	Public Works - Parks and Forestry			Supports:	Culture and Leisure				
Partners:	Town Manager, ITC			Useful Life:	More than eighteen (18) years				
Parameters								Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?								No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?								No	
3. Does this project require any permitting by any Town or State agency?								Yes	
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?								Yes	
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?								No	
6. If funded, will additional permanent staff be required?						Total New FTE's:	0	No	
7. If funded, will the operating budget need to be increased to cover operating expenses?								No	
8. If funded, will this project lower the requesting Department's operating costs?								No	
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?								No	
10. If the project is NOT funded, will current Town revenue be reduced?								No	
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?								No	
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?								Yes	
13. Is this a request in response to a Court, Federal, or State order?								No	
14. Is this a request in response to a documented public health or safety condition?								No	
15. Is this a request to improve or make repairs to extend the useful life of a building?								No	
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?								No	
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?								No	
18. Will any other department be required to provide assistance in order to complete the project?								Yes	
19. If funded, will this project increase the operating expense for any other department?								No	
Project Cost:	\$958,000	How was the Project Cost Determined:			In-House Estimate				
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000								
Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025	
Planning/Feasibility	\$0								
Design/Engineering	\$52,000		\$52,000						
Land/ROW Acquisition	\$0								
Site Preparation	\$0								
Construction	\$906,000			\$906,000					
Construction Management	\$0								
Equipment	\$0								
Furniture, Fixtures, and Equipment	\$0								
Technology Hardware/Software	\$0								
Other Expenses	\$0								
TOTAL	\$958,000	\$0	\$52,000	\$906,000	\$0	\$0	\$0	\$0	
\$0									

Capital Project Request

Project Title: Town Common Historic Redesign and Beautification

Fiscal Year: 2020

Project Description and Considerations

The Town is presently completing an internal design process for the Town Common. This will include improved hardscape, landscaping, amenities, tree plantings, and utility improvements that are consistent with the historic nature of the common as well as the improvements being made in the Downtown Streetscape Improvement Project.

This project includes improving the landscaping with new sod, trees, and plantings. The hardscape services will be upgraded to include more low maintenance materials as well as be more handicap accessible. The pathways and landscaping will be adjusted to become more aesthetically pleasing and functionally enhanced. There will be increased electrical and sound capacity to accommodate Town-wide events. This work will complement the new Town Hall and enhance the new "blue tree".

DPW and the Parks and Forestry Division did a thorough review of their workload over the next five years in order to prioritize their schedule based on the volume of projects and their timing. Due to this review, it has been decided this project is going to be pushed back a year.

- 3. This project may be subject to Planning Board review.
- 4. ITC will need to be involved for Wifi and electrical connectivity.
- 12. This project is being evaluated for eligibility of Community Preservation Funds under the category of Historic Preservation.
- 18. The Town Manager's Office will be involved.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Traffic Improvements **Fiscal Year:** 2019

Purpose:	Construction	Classification:	Infrastructure	Status:	Amended Request from the Prior CIP
Department:	Public Works - Engineering			Supports:	Transportation Network
Partners:				Useful Life:	More than eighteen (18) years

Parameters	Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	No
6. If funded, will additional permanent staff be required?	No
7. If funded, will the operating budget need to be increased to cover operating expenses?	Yes
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	Yes
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	Yes
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No
19. If funded, will this project increase the operating expense for any other department?	Yes

Project Cost:	\$250,000	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	May increase annual operating expenses between \$5,001 and \$25,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$0							
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$250,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000		
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$250,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$0	\$0

\$0

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Traffic Improvements

Fiscal Year:

2019

Project Description and Considerations

This Article will allow for the funding of projects that are recommended by the Traffic Management Advisory Committee (TMAC). These recommendations include items such as permanent speed monitoring devices, traffic calming measures, and school zone enhancements. These items are not presently included in the Department of Public Works operating budget. The \$50,000 annual request will support one or two TMAC construction related requests per year such as 500 feet of roadway granite curb installation, two school zone installations, two average traffic calming installations, several radar sign installations, or sign and/or pavement markings.

FY19 (Pending TMAC Approval)

- Granite curb installation on Paul Revere Road and Brookline Road.

Examples of Previous TMAC Requests

- Flashing LED pedestrian signs and school zone signs for Eliot School.
- Handicap ramps and cross-walks at various locations.
- Children playing signs.

Examples of Potential Future TMAC Projects

- Advisory curve signs with speed tabs on Forest Street.
- Traffic signal timing adjustments at Great Plain Avenue and Central Avenue.

3. Depending on recommendations from TMAC there may be permitting requirements with the Conservation Commission, Planning Board, Zoning Board of Appeals, and Building Department.

7. The maintenance budget for the Highway Division will need to be increased so that improvements can be maintained. The cost of maintenance will vary based on the type of improvement made. This can vary from \$100-\$1,000 annually.

14. This request is in response to the recommendations by the TMAC and Safe Routes to School report.

16. Improvements under this article could include signage, signaling, curbing, or other traffic calming measures that will be permanently installed at the determined locations.

19. If electricity is required for any of these improvements, then the Needham Light, Electric, and Gas Program budget may be increased to fund the electricity costs.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Building Management System Upgrade **Fiscal Year:** 2019

Purpose:	Construction	Classification:	Technology	Status:	Amended Request from the Prior CIP
Department:	Public Works - Building Maintenance			Supports:	Other (see below for information)
Partners:	ITC, School Department			Useful Life:	More than eight (8) years

Parameters **Response**

1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	Yes
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	Yes
6. If funded, will additional permanent staff be required?	No
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	Yes
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	\$322,000	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$0							
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$322,000	\$102,000	\$126,000	\$94,000				
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$322,000	\$102,000	\$126,000	\$94,000	\$0	\$0	\$0	\$0

\$0

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Building Management System Upgrade

Fiscal Year:

2019

Project Description and Considerations

The Town maintains a Building Management System (BMS) on the school's server to manage the heating and cooling in all major facilities in Town. All of the buildings constructed since 2009, with the exception of the Newman, are on the same system called Control Suite, LON works. These systems consist of internal sensors in the HVAC components and a backend software product that allows Building Maintenance staff to review and diagnose HVAC issues remotely as well as on-site. This system is critical to the maintenance of healthy air temperatures in the building.

The IT department for the Town would like to upgrade and standardize all of the BMS so that we are only utilizing and maintaining one system. A part of the Newman School will need to remain on a separate system because of the devices installed at the time of renovation. A retrofit would be necessary to completely migrate it to the new software. This conversion will allow for greater standardization and will change the manner of how HVAC data is communicated. Currently, there are computer interfaces talking to devices within the building and then communicating this information to an outside computer for management. This new software would create a virtualized environment where the software would only be on the back end and no longer on the devices. This will rid us of unnecessary redundancy and help to improve tracking. This will also allow all of the Town's buildings to integrate with the Town's afterhours permitting system, which will reduce the amount of time it takes staff to input irregular schedules and ensure appropriate temperature for afterhours events. Additionally, the Town's IT Department would like the system to be migrated to the Town's network, and the standardization will assist in this process.

This proposal is a phased approach to replacing the Front End of the BMS system so that all the buildings in Town will be on one system. It is proposed that this system will be the SmartStruxure Building Management System.

This request is being moved forward a year, to start in FY19. The existing Building Maintenance System is a legacy system in the oldest buildings and will not be supported in the near future. The current old system requires manual schedule adjustments for all after school activities and vacations. The new system will integrate with the Town's after hours permitting software and will not require manual override. The new Williams School, opening potentially in FY20, will also be on the SmartStruxure Building Management System.

In FY19, the Town will upgrade the Front End Software and complete the conversion of the Pollard, Broadmeadow, Library, Mitchell, and Eliot. These are the oldest BMS systems in Town and it is possible in the future, the control panel for these systems will no longer be serviced.

In FY20, the Town will upgrade the High School and the Newman School. The High School has the most sophisticated HVAC system in Town and therefore is the most expensive to convert.

In FY21, the Town will upgrade the Town Hall, High Rock, PSAB, Hillside, and Center at the Heights. If the Hillside is no longer being occupied at this time, it will not be converted.

Supports Other: Supports building infrastructure.

4. The request will require assistance from the IT Department.
5. This is a Building Maintenance request.
18. The School Department will be involved.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: CATH Space Utilization Study **Fiscal Year:** 2023

Purpose:	Feasibility Study	Classification:	Building	Status:	Informational Only Details Incomplete
Department:	Public Works - Building Maintenance			Supports:	Community Services
Partners:	Health and Human Services, Council on Aging			Useful Life:	More than five (5) years

Parameters	Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	Yes
6. If funded, will additional permanent staff be required?	No
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	Yes
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	Yes
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	\$30,000	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025	
Planning/Feasibility	\$0								
Design/Engineering	\$30,000					\$30,000			
Land/ROW Acquisition	\$0								
Site Preparation	\$0								
Construction	\$0								
Construction Management	\$0								
Equipment	\$0								
Furniture, Fixtures, and Equipment	\$0								
Technology Hardware/Software	\$0								
Other Expenses	\$0								
TOTAL	\$30,000	\$0	\$0	\$0	\$0	\$0	\$30,000	\$0	\$0

\$0

Capital Project Request

Project Title: CATH Space Utilization Study

Fiscal Year: 2023

Project Description and Considerations

Funding is requested to support a space utilization study and an assessment of building needs at the Center at the Heights (CATH) in light of the Town's commitment to expand hours of operation of the building. A high priority of the Council on Aging, the focus of this independent, expert-led study would be on the program, office, and clinical spaces within the CATH and ensuring optimal utilization and program flexibility for participants. Additional points of emphasis for this study would include deck configuration and level of usage, enhancing and expanding the utilization of the restaurant-grade kitchen, and a review of parking and building access challenges for Needham's seniors.

5. This is a request submitted by the Building Maintenance Division.

15. This request is to improve the usage of the existing space and possibly improve it, depending on the results of the feasibility study.

18. Assistance will be required from the Council on Aging and the Department of Health and Human Services.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: DPW Boiler Replacement - 470 Dedham Ave		Fiscal Year: 2019	
Purpose:	Construction	Classification:	Building
Department:	Public Works - Building Maintenance		Status:
Partners:		Supports:	Amended Request from the Prior CIP
		Useful Life:	Other (see below for information)
			More than eighteen (18) years

Parameters	Response		
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No		
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No		
3. Does this project require any permitting by any Town or State agency?	Yes		
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No		
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	Yes		
6. If funded, will additional permanent staff be required?	No		
7. If funded, will the operating budget need to be increased to cover operating expenses?	No		
8. If funded, will this project lower the requesting Department's operating costs?	Yes		
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No		
10. If the project is NOT funded, will current Town revenue be reduced?	No		
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No		
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No		
13. Is this a request in response to a Court, Federal, or State order?	No		
14. Is this a request in response to a documented public health or safety condition?	No		
15. Is this a request to improve or make repairs to extend the useful life of a building?	Yes		
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	Yes		
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No		
18. Will any other department be required to provide assistance in order to complete the project?	No		
19. If funded, will this project increase the operating expense for any other department?	No		
Project Cost:	\$434,000	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$34,000	\$34,000						
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$400,000		\$400,000					
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$434,000	\$34,000	\$400,000	\$0	\$0	\$0	\$0	\$0

\$0

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: DPW Boiler Replacement - 470 Dedham Ave

Fiscal Year:

2019

Project Description and Considerations

This request is to replace the DPW boiler with two high efficiency condensing boilers. The increase to two boilers is based on both the need for redundancy in the heating season and the desire to improve energy efficiency. The boiler at the DPW was installed in 1961 and is past its useful life. This piece of equipment has required a number of repairs in order to maintain it in working order. Significant repairs were necessary in FY10 and FY12 at costs of \$60,000 and \$25,000 respectively. In FY15, \$4,180 was spent on repairs. A new boiler will improve the energy efficiency of heating the DPW. Installing two units will ensure that if one unit needs repair during the heating season, the building will have sufficient heat to prevent the pipes from freezing.

After review, the Building Maintenance Division has pushed the construction phase of this project back to FY20 in order to allow proper time for a thorough design. Additionally, the division is adding upgrading the heat piping throughout the building to the construction phase. This is in response to a review and analysis of the existing piping in the building with the assumption that the building will need to remain in use for the foreseeable future.

The new boiler will be designed for natural gas and will increase the energy efficiency of the heating systems at the DPW. This project may be eligible for energy efficiency rebates to offset the cost of buying a more efficient model.

There is an estimated 15-20% energy cost savings based on savings seen at the Pollard and Newman schools, which underwent similar boiler upgrades.

Supports Other: Supports building infrastructure.

3. Plumbing and electrical permits will be required.
5. This request is for the Building Maintenance Division.
8. Upgrading to an energy efficient boiler will reduce heating costs, but those are no longer included in Building Maintenance's budget.
15. This request will extend the life of the building.
16. The boiler will be permanently installed at this location.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Emery Grover Partial Window Replacement **Fiscal Year:** 2020

Purpose:	Construction	Classification:	Building	Status:	Informational Only Details Incomplete
Department:	Public Works - Building Maintenance			Supports:	Other (see below for information)
Partners:	Needham Public Schools, Community Preservation Committee			Useful Life:	More than twenty-five (25) years

Parameters	Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	Yes
6. If funded, will additional permanent staff be required?	No
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	Yes
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	Yes
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	Yes
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	Yes
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	Yes
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	\$360,000	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$30,000		\$30,000					
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$330,000			\$330,000				
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$360,000	\$0	\$30,000	\$330,000	\$0	\$0	\$0	\$0

\$0

Capital Project Request

Project Title: Emery Grover Partial Window Replacement

Fiscal Year: 2020

Project Description and Considerations

This request is to replace the eight arched windows on the front of the Emery Grover building. A prominent feature of the building, the existing windows are beyond their expected life span. They are inefficient, resulting in occupant discomfort and needless energy usage for heating and cooling. Replacing these windows will increase the energy efficiency of this building. The anticipated lifespan of the replacement windows is 50 years.

This request has been pushed back to FY20 in order to allow additional time for the Town to determine the future of the building. If a major renovation is not planned for this facility, then this repair is being recommended.

Supports Other: Supports building infrastructure.

- 3. Building permits will be required.
- 5. This request is for the Building Maintenance Division.
- 8. Energy efficiency upgrades will reduce energy costs, which are no longer handled by the Building Maintenance Division.
- 12. This project may be eligible for CPA funding.
- 15. This request is necessary to extend the life of the building.
- 16. The windows will be permanently installed.
- 18. This request will require assistance from the School Department.

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Capital Project Request

Project Title: Emery Grover Roof Replacement **Fiscal Year:** 2022

Purpose:	Construction	Classification:	Building	Status:	Informational Only Details Incomplete
Department:	Public Works - Building Maintenance			Supports:	Other (see below for information)
Partners:	School Department, Community Preservation Committee			Useful Life:	More than twenty-five (25) years

Parameters **Response**

1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	Yes
6. If funded, will additional permanent staff be required?	Total New FTE's: 0 No
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	Yes
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	Yes
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	Yes
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	Yes
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	Yes
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	\$175,000	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$15,000			\$15,000				
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$160,000				\$160,000			
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$175,000	\$0	\$0	\$15,000	\$160,000	\$0	\$0	\$0

\$0

Capital Project Request

Project Title: Emery Grover Roof Replacement

Fiscal Year: 2022

Project Description and Considerations

This request is to replace the existing roof at the Emery Grover Building. The existing slate roof at the Emery Grover is over 100 years old. It poses a continual maintenance problem and is beyond the expected 75 year life span of this roof type. In the Spring of 2010, leaks in the roof caused damage to flooring materials. These circumstances forced the Department to reprioritize its summer asbestos abatement work and caused interruption to the operations of the building .

A new environmentally conscious material that mimics the aesthetics of slate, but is composed of recycled rubber from tires, will be used to replace this roof. This material would reduce the cost of installation by over one third and would reduce the cost of maintenance. The anticipated lifespan of this material is 50 years. If slate material is required, the cost of this installation would be \$237,537.

Replacing this roof will increase the energy efficiency of this building. It will decrease leaks, the cost of repairs, and the inconvenience to the occupants.

The Building Maintenance Division is adding a design phase in FY21 in order to ensure that the new roof will meet all the requirements of the building.

This project is pending the results of the Emery Grover feasibility study.

Supports Other: Supports building infrastructure.

- 3. Building permits will be required.
- 5. This request is for the Building Maintenance Division.
- 8. Energy efficiency upgrades will reduce energy costs, which are no longer handled by the Building Maintenance Division.
- 12. This project may be eligible for CPA funding.
- 15. This request is necessary to extend the life of the building.
- 16. The roof will be permanently installed.
- 18. This request will require assistance from the School Department.

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Capital Project Request

Project Title: Energy Efficient Upgrades		Fiscal Year: 2019	
Purpose:	Construction	Classification:	Building
Department:	Public Works - Building Maintenance		Status:
Partners:	Building Occupants		Supports:
		Useful Life:	Amended Request from the Prior CIP
			Other (see below for information)
			More than twelve (12) years
Parameters			Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?			No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			Yes
6. If funded, will additional permanent staff be required?			No
			Total New FTE's: 0
7. If funded, will the operating budget need to be increased to cover operating expenses?			No
8. If funded, will this project lower the requesting Department's operating costs?			Yes
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?			No
10. If the project is NOT funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			No
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			Yes
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			Yes
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			Yes
19. If funded, will this project increase the operating expense for any other department?			No
Project Cost:	\$471,000	How was the Project Cost Determined:	Hired Consultant
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$100,000			\$100,000				
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$371,000	\$64,000	\$7,000	\$100,000	\$100,000	\$100,000		
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$471,000	\$64,000	\$7,000	\$200,000	\$100,000	\$100,000	\$0	\$0

\$0

Town of Needham
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Capital Project Request

Project Title: Energy Efficient Upgrades

Fiscal Year:

2019

Project Description and Considerations

The 2011 May Special Town Meeting approved Article 6 to fund an engineering study for energy upgrades. This study was conducted on 10 key buildings in August and September of 2011 and the results were issued in October 2011. The results of this study illustrate that if the Town makes an initial investment in selected and recommended energy upgrades, the cost of these upgrades will pay for themselves within 10 years.

Recent Projects Include:

In FY16, the division completed numerous energy efficiency lighting upgrades, including: exterior lighting and gym lighting at the Broadmeadow School, exterior lighting at the High Rock School, exterior lighting at Needham High School, gym lighting at the Eliot School, exterior lighting at the Needham Public Library, gym lighting at the Pollard School, and exterior lighting at the Public Services Administration Building (PSAB).

The division was also able to do the following additional energy efficiency upgrades: lighting in the cafe and auditorium at the Eliot School, gym lighting in the B gym at Needham High School, gym lighting at the Hillside School, and auditorium lighting at the Pollard School.

In FY17, the division completed numerous energy efficiency lighting upgrades, including: lighting in the gym at the Mitchell School, and exterior lighting and lighting in the garage at the DPW Building. The initial plan had been to perform retrocommissioning on the HVAC controls at the Eliot School, but due to conflicts over the summer, the work has been postponed to FY19. The funds were used to complete the work above.

In FY18, the division will upgrade the air conditioning and the lighting in the cafe at the Mitchell School.

In FY19, the division intends to install a bi-lighting system in the hallways at the Pollard Middle School (\$7,000) and retrocommission the HVAC system at the Eliot (\$57,000).

In FY20, the division intends to install a bi-lighting system in the hallways at the High Rock School (\$7,000).

In FY21, the division intends to retrocommission the HVAC system at the High School (\$100,000). Additionally, the division intends to do another energy efficiency study (\$100,000). The original study was only focused on 10 buildings that had some age. This study will focus on buildings that were not addressed in the original study, including Town Hall, PSAB, Newman School, and Center at the Heights, in addition to the original buildings that will not be undergoing renovation shortly. The improvement in technologies necessitates that this study be conducted approximately every 10 years.

Supports Other: Supports building infrastructure.

3. Building, electrical, and plumbing permits will be required.
5. This request is for the Building Maintenance Division.
8. Energy efficiency upgrades will reduce energy costs, but these are no longer included in Building Maintenance's budget.
15. This request will modernize building components.
16. Building components will be permanently installed.
18. This request will require help from the occupants of the buildings being addressed.

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Capital Project Request

Project Title: Facility Assessment for Sustainable Building Management **Fiscal Year:** 2019

Purpose:	Feasibility Study	Classification:	Building	Status:	Amended Request from the Prior CIP
Department:	Public Works - Building Maintenance			Supports:	Other (see below for information)
Partners:	Needham Public Schools			Useful Life:	More than eight (8) years

Parameters

Response

1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	Yes
6. If funded, will additional permanent staff be required?	No
Total New FTE's:	0
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	Yes
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	Yes
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost: **\$100,000** How was the Project Cost Determined: Industry References

Budget Impact: Negligible impact on the annual operating expenses less than \$5,000

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$100,000	\$100,000						
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$0							
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$100,000	\$100,000	\$0	\$0	\$0	\$0	\$0	\$0

\$0

Capital Project Request

Project Title: Facility Assessment for Sustainable Building Management

Fiscal Year:

2019

Project Description and Considerations

This is a request for the assessments of public buildings throughout the Town and School Department in order to fully determine the condition of the facility and to identify repair and replacement needs and costs. We will use the results of the facility assessments to dictate future projects for Facilities Maintenance Articles.

In FY19, the division requests that a facility assessment be done on the Broadmeadow and Eliot Elementary Schools. Both buildings will be approaching the age of 20 years old and may require upgrades beyond general maintenance. An assessment would be done on facility conditions including HVAC systems, plumbing, roofing, and boilers, in order to create a plan to address the facility needs.

We will evaluate other buildings as they approach their individual 20 year marks to see if they require any upgrades. This will be used to keep up maintenance and upgrades on all public buildings as they age and require more than average maintenance. It will assist the division in prioritizing projects deemed necessary or useful by the assessments. The assessments will be useful in creating and maintaining sustainable buildings.

Supports Other: Supports building infrastructure.

5. This is a Building Maintenance request.

15. This study is anticipated to make recommendations that will extend the life of the building in a sustainable way.

18. Assistance will be required from the School Department.

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Capital Project Request

Project Title: Harris Ave Parking Lot				Fiscal Year: 2023	
Purpose:	Construction	Classification:	Infrastructure	Status:	Informational Only Details Incomplete
Department:	Public Works - Building Maintenance		Supports:	Transportation Network	
Partners:	School Department		Useful Life:	More than twelve (12) years	
Parameters				Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?					No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?					No
3. Does this project require any permitting by any Town or State agency?					Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?					No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?					Yes
6. If funded, will additional permanent staff be required?				Total New FTE's:	0
7. If funded, will the operating budget need to be increased to cover operating expenses?					No
8. If funded, will this project lower the requesting Department's operating costs?					No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?					No
10. If the project is NOT funded, will current Town revenue be reduced?					No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?					No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?					No
13. Is this a request in response to a Court, Federal, or State order?					No
14. Is this a request in response to a documented public health or safety condition?					No
15. Is this a request to improve or make repairs to extend the useful life of a building?					No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?					Yes
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?					No
18. Will any other department be required to provide assistance in order to complete the project?					Yes
19. If funded, will this project increase the operating expense for any other department?					No
Project Cost:	\$525,000	How was the Project Cost Determined:	In-House Estimate		
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000				

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$25,000					\$25,000		
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$500,000						\$500,000	
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$525,000	\$0	\$0	\$0	\$0	\$25,000	\$500,000	\$0

\$0

Town of Needham
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Capital Project Request

Project Title: Harris Ave Parking Lot

Fiscal Year: 2023

Project Description and Considerations

In FY23, the Building Maintenance Division will go out for a design to update the parking lot on Harris Avenue at the Pollard School. The Harris Avenue parking lot is presently made up of two different parking areas. The area to the left is the large main parking lot. The area to the right was converted to a temporary paved parking lot that was not constructed with the intention of supporting automotive vehicles. Both parking lots suffer from structural deficiencies and lack of drainage. Additionally, due to the expanding student population at the Pollard, as well as additional educational requirements, such as Special Education, there is a need for more staff and visitor parking. Currently, visitors park in the bus loop after hours or along the road. This design will look at the renovation of the existing lot, including capturing additional space where possible. The construction phase will follow in FY24, allowing for a proper design to be in place.

3. This request may be subject to Planning Review, Conservation Commission, Street Opening Permits, and Building Permits.
5. This is a Building Maintenance request.
16. The parking lot will be permanently installed.
18. This request will require support from Highway and the School Department.

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Capital Project Request

Project Title: High Rock Locker Room Upgrades **Fiscal Year:** 2023

Purpose:	Construction	Classification:	Building	Status:	New Request
Department:	Public Works - Building Maintenance			Supports:	Other (see below for information)
Partners:	School Department			Useful Life:	More than twelve (12) years

Parameters

Response

1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	Yes
6. If funded, will additional permanent staff be required?	No
Total New FTE's:	0
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	Yes
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	Yes
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	Yes
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	\$220,000	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$20,000					\$20,000		
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$200,000						\$200,000	
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$220,000	\$0	\$0	\$0	\$0	\$20,000	\$200,000	\$0

\$0

Capital Project Request

Project Title: High Rock Locker Room Upgrades

Fiscal Year: 2023

Project Description and Considerations

The existing locker rooms at the High Rock School are not sufficient for the number of students who need to utilize it daily. The High Rock School serves the sixth grade population of Needham, and conducts daily physical education classes which require students to change their clothes. The current space is insufficient for an entire class of students to utilize at one time. There are not enough lockers in each space to accommodate the 60 students in each class (30 boys and 30 girls). It is a struggle to get students sufficient time to change in and out of their gym clothing and on to other activities in a timely fashion and that time takes away from the learning environment. This request would renovate the two existing locker rooms, making each locker room able to serve at least 30 students at a time. It would evaluate the space and the space surrounding the gym to find appropriate space and determine the best design allowing for appropriately sized lockers and locker rooms.

Supports Other: Supports building infrastructure.

- 3. Building permits will be required.
- 5. This is a Building Maintenance request.
- 15. This will improve the existing locker rooms, increasing their lifespan.
- 16. The lockers will be permanently installed.
- 18. This request will require assistance from the School Department.

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Capital Project Request

Project Title: Mitchell Bathroom Upgrades **Fiscal Year:** 2021

Purpose:	Construction	Classification:	Building	Status:	New Request
Department:	Public Works - Building Maintenance			Supports:	Other (see below for information)
Partners:	School Department			Useful Life:	More than twenty-five (25) years

Parameters

Response

1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	Yes
6. If funded, will additional permanent staff be required?	No
Total New FTE's:	0
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	Yes
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	Yes
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	Yes
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	\$660,000	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$60,000			\$60,000				
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$600,000				\$600,000			
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$660,000	\$0	\$0	\$60,000	\$600,000	\$0	\$0	\$0

\$0

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Capital Project Request

Project Title: Mitchell Bathroom Upgrades

Fiscal Year: 2021

Project Description and Considerations

This request is to upgrade the six existing bathrooms at the Mitchell School and provide two additional Staff Only accessible bathrooms. This would include making them ADA/MAAB accessible. Many of the existing plumbing fixtures are 40 to 60 years old. This upgrade would include replacing them with new water saving fixtures. The current stalls are not the proper size and do not include grab bars. The urinals and dispensers are not set at the proper height. There are no insulated pipes at the sink. In order to meet ADA/MAAB requirements, the clearance for the entrance and turning circle will need to be increased, and the door hardware will need to be upgraded. The Building Maintenance Division would partner with the School Department and go out for a design in FY21 and then construction in FY22. This would allow them time to fully investigate the needs of the school.

Supports Other: Supports building infrastructure.

- 3. Building and electrical permits will be required.
- 5. This is a Building Maintenance request.
- 15. This request will improve the bathrooms and extend their usage.
- 16. All fixtures will be permanently installed.
- 18. Assistance will be required from the School Department.

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Capital Project Request

Project Title: Mitchell Locker Replacement		Fiscal Year: 2019	
Purpose:	Construction	Classification:	Building
Department:	Public Works - Building Maintenance	Status:	New Request
Partners:	School Department	Supports:	Other (see below for information)
		Useful Life:	More than twelve (12) years
Parameters			Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?			No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			Yes
6. If funded, will additional permanent staff be required?			Total New FTE's: 0 No
7. If funded, will the operating budget need to be increased to cover operating expenses?			No
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?			No
10. If the project is NOT funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			No
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			Yes
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			Yes
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			Yes
19. If funded, will this project increase the operating expense for any other department?			No
Project Cost:	\$70,000	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$0							
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$70,000	\$70,000						
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$70,000	\$70,000	\$0	\$0	\$0	\$0	\$0	\$0

\$0

Capital Project Request

Project Title: Mitchell Locker Replacement

Fiscal Year: 2019

Project Description and Considerations

The current lockers at the Mitchell School are in need of repair. They are not appropriately sized for the school age population at the Mitchell and are broken. This request is to replace the existing lockers with lockers that are better suited for elementary school children. The Mitchell School is not scheduled to be renovated for at least ten years and this would help to improve the appearance as well as the functionality of the school. There are three different types of lockers at the Mitchell. One set require two students to share each locker. One set is too narrow to store backpacks. This results in the locker doors remaining open, which is dangerous in the hallways. The last set just needs refurbishment. The replacement lockers would be stacked on top of each other in order to accommodate wider lockers. These lockers would be easier for elementary aged students to store their backpacks and other items in, as well as be easier to open and close. This will allow each student to have their own locker.

Supports Other: Supports building infrastructure.

- 5. This is a Building Maintenance request.
- 15. This request will improve the bathrooms and extend their useful life.
- 16. All fixtures will be permanently installed.
- 18. Assistance will be required from the School Department.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Pollard AC Upgrades		Fiscal Year: 2022	
Purpose:	Construction	Classification:	Building
Department:	Public Works - Building Maintenance	Status:	Informational Only Details Incomplete
Partners:	School Department	Supports:	Other (see below for information)
		Useful Life:	More than twelve (12) years
Parameters			Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?			No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			Yes
6. If funded, will additional permanent staff be required?			Total New FTE's: 0 No
7. If funded, will the operating budget need to be increased to cover operating expenses?			No
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?			No
10. If the project is NOT funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			No
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			Yes
19. If funded, will this project increase the operating expense for any other department?			Yes
Project Cost:	\$1,225,000	How was the Project Cost Determined:	Industry References
Budget Impact:	May increase annual operating expenses between \$5,001 and \$25,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$100,000				\$100,000			
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$1,125,000					\$550,000	\$575,000	
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$1,225,000	\$0	\$0	\$0	\$100,000	\$550,000	\$575,000	\$0

\$0

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Pollard AC Upgrades

Fiscal Year: 2022

Project Description and Considerations

Currently, the Pollard Middle School only has supplemental AC in approximately one third of the building. This request would evaluate the space to determine how to bring AC to the rest of the building and would address which method of supplemental AC, roof top units or window units, would be most efficient. The comfort and temperature of the educational learning space is an important aspect of school maintenance. This would help to address those concerns, especially since school is starting in August, earlier than before. Additionally, providing AC throughout the building would make the Pollard more ideal for use in the summer. Currently, the Pollard is underutilized during the summer for summer programs because there is no AC in the building. Adding additional AC would allow more groups to utilize the Pollard during the summer when other schools are closed for renovations.

Supports Other: Supports building infrastructure.

5. This is a Building Maintenance request.

18. Assistance will be required from the School Department.

19. The building is currently not air conditioned. Installing air conditioning throughout the building will increase energy costs, which are handled by the Needham ELG.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Pollard Blue and Green Gym Upgrades **Fiscal Year:** 2019

Purpose:	Construction	Classification:	Building	Status:	Amended Request from the Prior CIP
Department:	Public Works - Building Maintenance			Supports:	Other (see below for information)
Partners:	Needham Public Schools			Useful Life:	More than eighteen (18) years

Parameters

Response

1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	Yes
6. If funded, will additional permanent staff be required?	Total New FTE's: 0
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	Yes
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	Yes
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	Yes
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	Yes
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	\$570,000	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$0							
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$570,000	\$540,000	\$30,000					
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$570,000	\$540,000	\$30,000	\$0	\$0	\$0	\$0	\$0

\$0

Town of Needham
Capital Improvement Plan
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Capital Project Request

Project Title: Pollard Blue and Green Gym Upgrades

Fiscal Year:

2019

Project Description and Considerations

The Pollard gyms were identified in the feasibility study conducted in 2011 as in need of upgrades and have additionally been identified by the Director of Athletics as in need of improvement. These improvements consist of replacing the present rubber flooring with another material that is more appropriate for basketball use, upgrading lighting, and installing mats along the side of the gym for safety. Lighting upgrades were completed under the Energy Efficient Upgrades request in FY16.

In FY19, this project would replace the flooring only in the Blue and Green Gyms. The present rubber flooring is not ideal for basketball use and this building is used frequently by both school and community basketball groups due to its size. The rubber flooring will be replaced by a new type of flooring that would have the same bounce as wood flooring required for basketball usage, but does not have the ADA/MAAB accessible issues that wood flooring presents. Additionally, work will be done to improve the functionality and safety of both gyms. In the Blue Gym, the siding will be removed and replaced. The Blue Gym will also be painted to brighten the area. Backboards and winch mechanisms on the basketball hoops will be replaced and winch mechanisms will be installed on hoops that do not currently have them. Padding will also be installed behind all backboards. In the Green Gym, two sections of pull out seating, approximately 15'x15' each, will be installed in order to accommodate classes.

In FY20, the scoreboards in both gyms will be removed and replaced. Shot clocks will be installed in the Green Gym. The basketball scoreboard and shot clocks in both gyms are beyond their useful life and the technology is outdated. The current system is based on incandescent bulb technology, which is not energy efficient. The replacement will include an electronic LED scoreboard and one set of shot clocks with wireless controls and technology in each gym.

Supports Other: Supports building infrastructure.

3. Building and electrical permits will be required.
5. This is a request for the Building Maintenance Division
8. Energy efficiency upgrades will reduce energy costs, no longer included in Building Maintenance's budget.
15. This request will modernize building components, thereby maximizing the usefulness of this building.
16. Flooring and wall coverings will be permanently installed.
18. This request will require assistance from the School Department and the Athletics Department.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Pollard Locker Room Retrofit **Fiscal Year:** 2021

Purpose:	Construction	Classification:	Building	Status:	Amended Request from the Prior CIP
Department:	Public Works - Building Maintenance			Supports:	Other (see below for information)
Partners:	Needham Public Schools			Useful Life:	More than twenty-five (25) years

Parameters

Response

1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	Yes
6. If funded, will additional permanent staff be required?	No
Total New FTE's:	0
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	Yes
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	Yes
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	Yes
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	\$690,000	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$60,000			\$60,000				
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$630,000				\$630,000			
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$690,000	\$0	\$0	\$60,000	\$630,000	\$0	\$0	\$0

\$0

Capital Project Request

Project Title: Pollard Locker Room Retrofit

Fiscal Year: 2021

Project Description and Considerations

This request is to retrofit the locker rooms at the Pollard Middle School. This project would include removing existing lockers, installing new lockers, replacing existing tile and bathroom fixtures, and painting.

Retrofitting the locker rooms will make the space more functional. The school has been offering more sports programs, therefore increasing the need for larger lockers for equipment. The current lockers are all the same size and are not sufficient for much of the equipment needed to be stored in the locker rooms during the day. The school is in need of a variety of locker sizes to accommodate the varying needs of the students. The tile flooring is starting to crack in places and will need replacing before becoming a safety hazard. Additionally, the bathrooms are outdated and are in need of an upgrade. These bathroom fixtures, in addition to the showers, will need to be addressed. General maintenance, such as painting and upgrading the lighting, will also improve the current appearance.

In FY21, the division will work with a consultant on a design for the locker room retrofit. The designer will help to recommend the most efficient layout for the locker rooms in order to accommodate the variety of needs. The construction phase will be done in FY22.

Supports Other: Supports building infrastructure.

3. Building, electrical, and plumbing permits will be required.
5. This request is for the Building Maintenance Division.
15. This request is necessary to extend the life of the building.
16. All components will be permanently installed.
18. This request will require assistance from the School Department.

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Capital Improvement Plan
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Capital Project Request

Project Title: Upgrade Boiler #1 at Hillside		Fiscal Year: 2020	
Purpose:	Construction	Classification:	Building
Department:	Public Works - Building Maintenance	Status:	New Request
Partners:	School Department	Supports:	Other (see below for information)
		Useful Life:	More than twenty-five (25) years
Parameters			Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?			No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			Yes
6. If funded, will additional permanent staff be required?			No
			Total New FTE's: 0
7. If funded, will the operating budget need to be increased to cover operating expenses?			No
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?			No
10. If the project is NOT funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			No
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			Yes
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			Yes
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			Yes
19. If funded, will this project increase the operating expense for any other department?			No
Project Cost:	\$231,000	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$11,000		\$11,000					
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$220,000			\$220,000				
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$231,000	\$0	\$11,000	\$220,000	\$0	\$0	\$0	\$0

\$0

Capital Project Request

Project Title: Upgrade Boiler #1 at Hillside

Fiscal Year: 2020

Project Description and Considerations

The Hillside School has two cast iron boilers that it relies on to heat the school. Boiler #1 has a leak that needs to be repaired. Since the Town plans on maintaining the Hillside as swing space, the Building Maintenance Division needs to address the deficiencies in boiler #1. Up until the Town was able to acquire the Owens' Property to construct a replacement for the Hillside Elementary School, it was conceived that the Hillside School, as it presently stands, would be torn down. With the construction of the school on an alternative location, the Hillside School looks as if it will be used for many purposes at least through the next decade. The existing boilers are from the renovation in 1998 and are approaching their 20 year life cycle. A study conducted in 2011 indicated that they should last for a few more years without major issues. Not only have we passed that time period, but we are anticipating that we will need to keep the boilers functioning into the future. The study recommended replacing the existing boilers with high efficiency condensing boilers. One of the main concerns with this older boiler is that many of the parts are no longer manufactured, so repairing the boiler becomes increasingly difficult.

Supports Other: Supports building infrastructure.

- 3. This request will require a Building Permit.
- 5. This is a Building Maintenance request.
- 15. Upgrading the boiler will help to keep the building in use in the future.
- 16. The boiler will be permanently installed at the school.
- 18. Assistance from the School Department will be required.

Town of Needham
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Capital Project Request

Project Title: Library Furniture **Fiscal Year:** 2019

Purpose:	Acquisition	Classification:	Equipment	Status:	Amended Request from the Prior CIP
Department:	Library			Supports:	Culture and Leisure
Partners:				Useful Life:	More than twelve (12) years

Parameters

Response

1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	Yes
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	No
6. If funded, will additional permanent staff be required?	Total New FTE's: 0
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	Yes
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	Yes
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	\$322,852	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$0							
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$0							
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$322,852	\$43,970	\$112,960	\$82,740	\$83,182			
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$322,852	\$43,970	\$112,960	\$82,740	\$83,182	\$0	\$0	\$0

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Capital Project Request

Project Title: Library Furniture

Fiscal Year: 2019

\$0

Project Description and Considerations

The "new" library has been open to the public for more than eleven years, and, due to heavy use, the furniture is beginning to show wear and tear. Both public and staff computer chairs are slowly breaking and the covering on the arms is splitting. For staff members, the computer chair is their desk chair. As staff chairs break, a public computer chair has been taken from the public computers and moved into a staff office. Some of the mesh on the community Room stackable mesh chairs is unravelling, the backs are separating from the frames, and food has been caught in the mesh and proven unable to be removed. The forty-two cloth public arm chairs are showing the ravages of heavy use, particularly the arms of the chairs. The thirty-eight leather public arm chairs are also beginning to show wear.

The prices listed in this request were obtained from manufacturer's websites.

29 Public computer chairs @ \$530 each	\$15,370
25 Staff computer chairs @\$1,144 each	\$28,600
160 Community Room audience stackable chairs @ \$706 each	\$112,960
42 Public lounge chairs (cloth) @1,970 each	\$82,740
38 Public lounge chairs (leather) @ \$2,189 each	\$83,182
Total	\$322,852

1. The services of a design consultant may be needed
16. All furniture would be installed at the library
18. Public Facilities personnel may be needed to help move furniture

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Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Library RFID Conversion Project		Fiscal Year: 2021	
Purpose:	Acquisition	Classification:	Technology
Department:	Library	Status:	Amended Request from the Prior CIP
Partners:		Supports:	Culture and Leisure
		Useful Life:	More than twelve (12) years
Parameters		Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?			Yes
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			No
6. If funded, will additional permanent staff be required?		Total New FTE's:	0
7. If funded, will the operating budget need to be increased to cover operating expenses?			Yes
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?			No
10. If the project is NOT funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			Yes
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			No
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			Yes
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			No
19. If funded, will this project increase the operating expense for any other department?			No
Project Cost:	\$327,200	How was the Project Cost Determined:	Industry References
Budget Impact:	May increase annual operating expenses between \$25,001 and \$50,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$0							
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$0							
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$313,766	\$0		\$313,766				
Technology Hardware/Software	\$8,684			\$8,684				
Other Expenses	\$4,750			\$4,750				
TOTAL	\$327,200	\$0	\$0	\$327,200	\$0	\$0	\$0	\$0

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Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Library RFID Conversion Project

Fiscal Year:

2021

\$0

Project Description and Considerations

RFID, Radio Frequency Identification, is the technology toward which libraries are migrating, as a means to increase efficiency and to cut down on repetitive action tasks. The advantages of the system include:

1. Reduction in the time necessary to check in and out library materials (in FY17 the library checked in and out more than 1,000,000 items--123,048 checkouts were done by customers on self-checkout.
2. Information can be read faster from the RFID tags than from barcodes
3. The items in a stack can be read at the same time, as opposed to barcodes that must be read one at a time. Checking a stack of materials in and out reduces repetitive action tasks, saving time and helping to avoid repetitive stress syndrome in employees
4. Patron self-checkout is simplified--patrons do not have to carefully line up a barcode with a laser beam
5. Opens the possibility of electronic inventorying, item searching, and shelf order checking

There are forty-three Minuteman Library Network libraries. Currently (fall 2017), thirteen Minuteman libraries are using RFID; three libraries are placing RFID tags in materials (the first step in migrating to RFID); and four more have expressed interest. The current thinking and discussions at Minuteman committee meetings is that, eventually, all Minuteman libraries will move to RFID. The libraries that are now operating with RFID have formed a "service" group for interlibrary loan service. Requests from these libraries go automatically to the other RFID libraries (they are the larger libraries in the system), where items are found and requests filled faster than at the non-RFID libraries. In FY17, Needham requested 64,843 items from other libraries for the use of Needham residents. Needham sent 55,937 items to other libraries. With an RFID system that includes a portable scanner, these items could have been retrieved faster from the library's shelves, increasing the efficiency of a library employee.

Further system investigation and observation at RFID libraries, has shown that, for the RFID system to function at a peak level of efficiency, it must include an automated sorting system. In this system, materials are placed on conveyer-type equipment where the RFID tag is read and the item automatically drops into a predetermined bin of like materials. The divide can include one bin for items that are on reserve; one for items that belong to another library; one for a library's nonfiction books; one for a library's fiction books; one for a library's children's books; plus many other useful divisions. The cost for a 15-bin system has been included below.

RFID System Cost:

RFID tags:	150,000 books @ \$0.16 each	\$24,000		
	35,000 media @ \$0.63 each	\$22,050	Total	\$46,050
Conversion Stations:				
	2 @ \$11,178 each		Total	\$22,356
Staff Station Equipment:				
	4 Staff Stations (Circulation Desk) @ \$4,895 each	\$19,580		
	1 Portable Scanner @ \$5,200	\$5,200	Total	\$24,780
Self-Checkout Equipment:				
	3 Self-Checkout Stations @ \$6,860 each		Total	\$20,580
Software:	4 Staff Stations @ \$266 each	\$1,064		
	3 Self-Checkout Stations @ \$2,540 each	\$7,620	Total	\$8,684
Sorting System:	15 bin automated sorting system	\$200,000	Total	\$200,000
Installation and Training:				

Capital Project Request

Project Title: Library RFID Conversion Project

Fiscal Year: 2021

Supplemental Information

On-Site Training (per day)	\$2,500	Total	\$4,750	
Total Project Cost:				\$327,200
1. The Circulation Desk area and adjacent lounge area would have to be reconfigured				
7. The Yearly Operating Budget would have to be increased for the cost of RFID tags:				
Books:	12,000 @ \$0.16 each	\$1,920		
Media	3,400 @ \$.63 each	\$2,142		
		Total	\$4,062	
and software licensing:				
	4 staff stations @\$266 each	\$1,064		
	3 self-checkout stations @2,540	\$7,620		
		Total	\$8,684	
and 15 bin sorting system maintenance	\$17,000	Total	\$17,000	
Total yearly operating budget increases:				\$29,746
11. Annual licensing listed under #7				
16. All equipment will be installed at the library				

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Athletic Fields Master Plan		Fiscal Year: 2022	
Purpose:	Feasibility Study	Classification:	Land
Department:	Park and Recreation	Status:	Amended Request from the Prior CIP
Partners:	DPW Parks and Forestry Division	Supports:	Culture and Leisure
		Useful Life:	More than twelve (12) years
Parameters		Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?			No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			No
6. If funded, will additional permanent staff be required?		Total New FTE's:	No
7. If funded, will the operating budget need to be increased to cover operating expenses?			No
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?			No
10. If the project is NOT funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			Yes
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			Yes
19. If funded, will this project increase the operating expense for any other department?			No
Project Cost:	\$75,000	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$75,000				\$75,000			
Design/Engineering	\$0							
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$0							
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$75,000	\$0	\$0	\$0	\$75,000	\$0	\$0	\$0

\$0

Capital Project Request

Project Title: Athletic Fields Master Plan

Fiscal Year: 2022

Project Description and Considerations

The Park and Recreation Commission has been working with user groups to determine how athletic fields are being used and how best to schedule the athletic fields to provide optimal use without jeopardizing the maintenance plan. The organizations and the Commission need to do some additional work together before the scope of a master plan can be created.

Renovations have occurred at several parks, and some school sites will be improved in upcoming years. The study would help the Commission determine whether new athletic fields are needed to accommodate the need and provide feasibility studies on possible locations for new athletic fields.

The ability for the Town to maintain current athletic facilities, along with any possible new facilities, would be included within the study. This project may be appropriate to submit for a warrant article as opposed to a capital request.

The project has been moved out to a later year, while it waits for additional field improvements to be completed. DPW Parks and Forestry will need to be involved as they are responsible for maintenance of athletic fields.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Boat Launch on Charles River **Fiscal Year:** 2021

Purpose:	Construction	Classification:	Land	Status:	Informational Only Details Incomplete
Department:	Park and Recreation			Supports:	Culture and Leisure
Partners:	Conservation Department/Town Manager			Useful Life:	More than twelve (12) years

Parameters	Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	No
6. If funded, will additional permanent staff be required?	No
7. If funded, will the operating budget need to be increased to cover operating expenses?	Yes
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	Yes
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	Yes
18. Will any other department be required to provide assistance in order to complete the project?	Yes
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	\$0	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$0							
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$0							
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

\$0

Capital Project Request

Project Title: Boat Launch on Charles River

Fiscal Year: 2021

Project Description and Considerations

The Town of Needham is adjacent to a major state resource - the Charles River. It creates about 2/3rds of the Town's border, with the City of Newton, the City of Boston, the Town of Dedham, and the Town of Dover, our neighbors on the other side of the river.

CPC funds of \$30,000 have been awarded to design an improved boat launch into the Charles River on Town-owned property on South Street, near the intersection of Dedham Avenue, but we have not started the formal design process as this is written. One of the on-call engineer firms will be chosen to work with Park and Recreation/Conservation departments on this project.

There is an existing unimproved launch for canoes and kayaks, with a circular driveway and parking for 10-12 vehicles. There is pedestrian access, only, to the river. The intention is to keep the launch in its natural setting, but create a more consistent access on a previous path, and possibly creating the ability for vehicles to back up to the launch area with their boats. Depending on the final design, it is hoped that maintenance will be minimal.

At a minimum, permits would be required from the Needham Conservation Commission.

A project estimate can be provided once the designer is able to provide options and the Town chooses a scope of work. Until a design is in place, it is not known whether there would be any maintenance or staffing costs related to operation.

Though design is funded, the project has not moved forward as Conservation and Park & Recreation staff have needed to concentrate on other projects. The Conservation Department is partnering on this project.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Cricket Field Building Renovation **Fiscal Year:** 2020

Purpose:	Design/Engineering	Classification:	Building	Status:	Amended Request from the Prior CIP
Department:	Park and Recreation			Supports:	Culture and Leisure
Partners:	PPBC; Public Facilities-Construction; DPW			Useful Life:	More than eighteen (18) years

Parameters

Response

1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	No
6. If funded, will additional permanent staff be required?	No
Total New FTE's:	
7. If funded, will the operating budget need to be increased to cover operating expenses?	Yes
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	Yes
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	Yes
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	Yes
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost: **\$811,000** How was the Project Cost Determined: Hired Consultant

Budget Impact: Negligible impact on the annual operating expenses less than \$5,000

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$162,000		\$162,000					
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$649,000			\$649,000				
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$811,000	\$0	\$162,000	\$649,000	\$0	\$0	\$0	\$0

\$0

Capital Project Request

Project Title: Cricket Field Building Renovation

Fiscal Year: 2020

Project Description and Considerations

Park and Recreation completed a feasibility study of the Cricket Field building with PPBC in March 2012. The study looked at (1) renovation of the building for current uses; (2) renovation of the building for year-round use; (3) construction of new building at same location; (4) construction of new building elsewhere on site. For the renovation options, code upgrades, including ADA, are included. Extensive work on the grounds is also required for accessibility. "Option 1 Modified" is used for the request, which is an update of the current layout for seasonal use only and a septic field. Option 1, without modifications, or a new modular building would be more than \$100,000 of additional costs. The design costs would also include a survey that is required for a building permit. The original estimate was created in 2012, with a 10% contingency. It is recommended to escalate the estimate by 5% annually, or review if a significant period of time passes. The numbers in this request have therefore been increased from the original estimate. The design/engineering costs were based on 20% of total project estimate.

The building is currently used for (a) Park and Recreation summer program; (b) Needham High Girls Soccer and Girls Lacrosse; (c) storage for Park and Recreation programs; and (d) storage for DPW Parks and Forestry. It is hoped that the building could be utilized for these purposes, and that public restrooms for those using the playgrounds or athletic fields would be available. The chosen option would also create an accessible building, and site work would add appropriate accessible parking. Approval of a new septic system as opposed to a sewer system would help reduce the cost of construction. The 1964 wood structure building is approximately 1,250 square feet. Without renovations, it will become more difficult to use it for the summer program, which would also be a loss of revenue of approximately \$30,000 as it isn't likely another site in Town would be available to accommodate the program. Donations have been made for other projects at the park, totaling about \$200,000. Those projects include the rebuilding of the athletic fields, addition of new playground equipment, and a bubbler and garden with park benches.

Any portion of the project related to outdoor recreation would be eligible for CPA funding, but indoor recreation is not eligible. Permits would be required from the Needham Health Department and the Planning Board. The costs do not include any unanticipated requirements of the permits. At some point, without renovation, the building will not be available for use by Park and Recreation for its summer program or by Needham High School Athletics. The loss of the summer program location would lead to a loss in revenue. Costs to use Cricket Field would increase for Needham High Athletics.

Currently, the building's restrooms are only used by Park and Recreation's summer program, as well as the Needham High teams. No other park user has access to the restrooms, so creating restrooms that are available to the park will increase the cost for cleaning by an outside firm.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Outdoor Basketball Courts **Fiscal Year:** 2023

Purpose:	Construction	Classification:	Infrastructure	Status:	New Request
Department:	Park and Recreation			Supports:	Culture and Leisure
Partners:	DPW			Useful Life:	More than twenty-five (25) years

Parameters

Response

1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	No
6. If funded, will additional permanent staff be required?	No
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	Yes
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	Yes
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	Yes
18. Will any other department be required to provide assistance in order to complete the project?	Yes
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	\$125,000	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025	
Planning/Feasibility	\$0								
Design/Engineering	\$25,000					\$25,000			
Land/ROW Acquisition	\$0								
Site Preparation	\$0								
Construction	\$100,000					\$100,000			
Construction Management	\$0								
Equipment	\$0								
Furniture, Fixtures, and Equipment	\$0								
Technology Hardware/Software	\$0								
Other Expenses	\$0								
TOTAL	\$125,000	\$0	\$0	\$0	\$0	\$0	\$125,000	\$0	\$0

\$0

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Outdoor Basketball Courts

Fiscal Year: 2023

Project Description and Considerations

The Town has outdoor basketball courts located at parks, including Mills Field, Greene's Field, Riverside Park, Perry Park; and half basketball courts at Cricket Field and Walker-Gordon Field.

Full or half courts are also located at Broadmeadow, Eliot, Hillside, Mitchell , Newman and High Rock, with a new court anticipated at the Williams School.

The Mills Field courts are ready for renovation, new backboards, and striping. The Perry Park courts can be painted, but cannot be rebuilt at the same location due to the former school's foundation. Riverside and Cricket would have minor repairs.

The Park and Recreation Commission is viewing the locations of basketball courts, to determine if a new set is needed in a new location. The design costs are to assist with the scope of work needed for repairs, or creation of a new court at a location where one doesn't currently exist.

DPW will provide guidance on the project scope, likely Parks & Forestry, Highway and Engineering.

Town of Needham
Capital Project Request

Project Title: Public Playgrounds		January 2018		Fiscal Year: 2019	
Purpose:	Acquisition	Classification:	Equipment	Status:	Amended Request from the Prior CIP
Department:	Park and Recreation			Supports:	Culture and Leisure
Partners:	School Department			Useful Life:	More than twenty-five (25) years
Parameters					Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?					No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?					No
3. Does this project require any permitting by any Town or State agency?					No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?					No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?					No
6. If funded, will additional permanent staff be required?					No
7. If funded, will the operating budget need to be increased to cover operating expenses?					No
8. If funded, will this project lower the requesting Department's operating costs?					No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?					No
10. If the project is NOT funded, will current Town revenue be reduced?					No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?					No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?					Yes
13. Is this a request in response to a Court, Federal, or State order?					No
14. Is this a request in response to a documented public health or safety condition?					No
15. Is this a request to improve or make repairs to extend the useful life of a building?					No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?					Yes
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?					Yes
18. Will any other department be required to provide assistance in order to complete the project?					Yes
19. If funded, will this project increase the operating expense for any other department?					No
Project Cost:	\$700,000	How was the Project Cost Determined:		In-House Estimate	
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000				

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$0							
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$700,000	\$300,000	\$400,000					
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$700,000	\$300,000	\$400,000	\$0	\$0	\$0	\$0	\$0

\$0

Project Description and Considerations

The Town of Needham has 18 public playground locations: Broadmeadow (2), Eliot (2), Hillside (2), Mitchell (1), Newman (3), Claxton, Cricket, DeFazio, Greene’s, Mills, Perry, Riverside, and Walker-Gordon.

Hillside and Mitchell have the oldest school-site playgrounds. The Williams School will have new playground equipment installed as part of the project. The Hillside equipment will be able to remain in use for visitors to the site, unless it needs to be removed for a temporary use of the school site.

The Mitchell Principal has requested that the playground equipment be replaced rather than wait until the school renovation project is done. Quality equipment, installed professionally, can be moved and re-used.

Broadmeadow’s Grade 1-5 and Kindergarten playgrounds were installed in 2002 and will likely need upgrades in upcoming years. Eliot’s two playgrounds were installed in 2004 and appear to be in excellent condition. Newman’s Grade 1-5 and Kindergarten playgrounds were installed in 2012 and are in excellent condition. The Preschool playground received a poured-in-place surface in 2013. Its equipment was originally purchased in 1998 and moved to the Newman site in 2004. It is in good condition, but will need some refreshing. An improvement recommended for Broadmeadow and Eliot would be the installation of poured-in-place pathways. Though the current wood fiber surfacing is considered ADA compliant, the MA Architectural Board may be creating a new ruling that will require other options for pathways. The addition of poured-in-place pathways reduces the wear and tear on the wood fiber surfacing, requiring less material to be installed a few times a year.

For the non-school playgrounds, all sites are in very good to excellent condition. Greene’s Field’s equipment was installed new in 2013, with a major donation from residents of over \$180,000. At this time, through existing funding sources, adaptations to the swings are being planned, to add a new ADA swing, and move the toddler swings into an area near the toddler equipment. The Exchange Club has “adopted” DeFazio and Claxton, adding improvements over several years. Parent Talk has “adopted” Cricket, Perry and Mills, with new playgrounds installed between 2001-2007. The Parent Talk Board would like consideration for upgrades at Perry Park. Riverside received new equipment in 2007 as part of the nearby Charles River Landing project. Walker-Gordon was replaced in 2013 as part of the park reconstruction project. Cricket will have ADA improvements completed when the park building is renovated.

The school projects will require consultation with the School Department, insuring their educational goals are met with any new structures. The estimate was made in-house, based on recent projects completed in Needham and informal discussions with playground and surfacing companies.

Town of Needham
Capital Project Request

Project Title: Public Playgrounds

January 2018

Fiscal Year:

2019

Supplemental Information

PLAYGROUND	MANUFACTURER/REPRESENTATIVE	YEAR	SURFACING	CURRENT CONDITIONS/NOTES
Broadmeadow	Miracle Playgrounds - Creative Recreation (CT)	2002	Fiber	Fair/Good: Paid for through PPBC building project and donations
Broadmeadow - Kindergarten	Miracle Playgrounds - Creative Recreation (CT)	2002	Fiber	Fair/Good: Paid for through PPBC building project and donations
Claxton	Landscape Structures - O'Brien and Sons (MA)	1994	Fiber	Excellent: Initial Town Capital Novemmer 2007 - partial renovation
Cricket	Landscape Structures - O'Brien and Sons (MA)	2005	Fiber	Very Good: Donated by Parent Talk
DeFazio	Landscape Structures - O'Brien and Sons (MA)	1997 -	Fiber/Sand	Excellent/Good: Inital Town Capital Donated by Exchange Club
Eliot	Landscape Structures - O'Brien and Sons (MA)	2004	Fiber	Very Good: Paid for through PPBC building project and donations
Eliot - Kindergarten	Landscape Structures - O'Brien and Sons (MA)	2004	Fiber	Excellent: Paid for through PPBC building project and donations
Greene's	Landscape Structures - O'Brien and Sons (MA)	2013	Poured in place	Excellent: CPA Funds and private donations
High Rock	N/A			Removed wooden structure; nothing returning in near future for 6th grade
Hillside	Landscape Structures - O'Brien and Sons (MA)	1995	Fiber	Very Good: Donated by school parents including 2011 improvements.
Hillside - Kindergarten	Kompan - Kompan NE (RI)	2001	Fiber	Good: Donated by school parents, and payment mad to Town by RCN for damages to school site.
Mills	Landscape Structures - O'Brien and Sons (MA)	2007	Fiber	Excellent: Donated by Parent Talk
Mitchell	Playworld - Ultiplay (MA)	1998	Fiber	Fair/Good: Donated by school parents
Newman	Landscape Structures - O'Brien and Sons (MA)	2012	Synthetic grass	Excellent: Donated by school parents plus some Town capital funding
Newman - Kindergarten	Landscape Structures - O'Brien and Sons (MA)	2012	Synthetic grass	Excellent: Donated by school parents plus some Town capital funding
Newman - Preschool	Landscape Structures - O'Brien and Sons (MA)	1998-2004	Poured in Place	Very Good: Donated by school parents 2013 p-i-p surface funded by CPA fund
Rebecca Perry	Landscape Structures - O'Brien and Sons (MA)	2001	Fiber	Excellent: Donated by Parent Talk
Riverside	Landscape Structures - O'Brien and Sons (MA)	2004 -	Fiber	Excellent: Donated by Hanover Co. as part of nearby construction
Rosemary Pool	N/A			Donated by Masons in 2016; removed 2017; to be replaced by spray
Walker-Gordon	Landscape Structures - O'Brien and Sons (MA)	2013	Fiber	Excellent: Town capital
Williams School	TBD	2019	TBD	Funded through construction project; likely be 2-3 locations with playground equipment

Possible Projects (as of August 2017):

- Add ADA swings at Greene's and Cricket - need specialized ADA surface to reach swings
- Parent Talk would like to discuss upgrades at Perry Park
- Mitchell School would like to make improvements: prefer full replacement, but also consider removing some equipment, adding some K equipment
- Broadmeadow and Eliot should get poured-in-place pathways; decision on whether to replace Broadmeadow equipment

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Purchase of Open Space		Fiscal Year: 2019	
Purpose:	Acquisition	Classification:	Land
Department:	Park and Recreation		Status:
Partners:	Conservation Commission; Board of Selectmen		Supports:
		Useful Life:	More than twenty-five (25) years
Parameters			Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?			No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			No
6. If funded, will additional permanent staff be required?		Total New FTE's:	No
7. If funded, will the operating budget need to be increased to cover operating expenses?			No
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?			No
10. If the project is NOT funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			Yes
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			Yes
19. If funded, will this project increase the operating expense for any other department?			No
Project Cost:	\$1,000,000	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$0							
Land/ROW Acquisition	\$1,000,000	\$1,000,000						
Site Preparation	\$0							
Construction	\$0							
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$1,000,000	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$0

\$0

Capital Project Request

Project Title: Purchase of Open Space

Fiscal Year: 2019

Project Description and Considerations

Without much notice, opportunities to purchase private land to add to the open space inventory surface each year. In particular, some opportunities arise during discussions of the development of private land. This project request is to keep all aware of the possibility, in the near future, of a purchase moving forward. This request is a "place holder" in the event a parcel that benefits the community becomes available.

Unexpectedly, in FY 2010, the purchase of two parcels of land on Carol Road and Brewster Drive, as well as a parcel on Charles River Street, adjacent to Walker-Gordon Field were all funded through CPA funds. It is possible that some purchases would relate to easements, as opposed to full ownership of the land. The Open Space and Recreation Plan reflects the goal of making additional purchases, especially in areas of Town without current open space to retain open areas, or to create access to other parcels, including connections to the Charles River. The purchase of parcels adjacent to current open space is also a high priority. Some parcels may require improvements which would be submitted as separate capital improvement projects. Under the current CPA legislation, parcels purchased with CPA funds are eligible for improvement funds from CPA. The CPA indicates how the value of the property is determined.

A conservation restriction would need to be placed on the property, under CPA requirements.

The Town Manager and Town Counsel would need to be involved in discussions, deliberations and negotiations.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Rosemary Lake Camp Property and Trail		Fiscal Year: 2019	
Purpose:	Construction	Classification:	Building
Department:	Park and Recreation	Status:	Amended Request from the Prior CIP
Partners:	DPW, Conservation Department	Supports:	Culture and Leisure
		Useful Life:	More than twenty-five (25) years
Parameters			Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?			No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			No
6. If funded, will additional permanent staff be required?			No
			Total New FTE's:
7. If funded, will the operating budget need to be increased to cover operating expenses?			No
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?			No
10. If the project is NOT funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			Yes
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			Yes
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			Yes
19. If funded, will this project increase the operating expense for any other department?			No
Project Cost:	\$250,000	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$0							
Land/ROW Acquisition	\$0							
Site Preparation	\$50,000	\$50,000						
Construction	\$200,000		\$200,000					
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$250,000	\$50,000	\$200,000	\$0	\$0	\$0	\$0	\$0

\$0

Capital Project Request

Project Title: Rosemary Lake Camp Property and Trail

Fiscal Year: 2019

Project Description and Considerations

The former request has been updated. The three remaining buildings at the property are continually vandalized and need to be removed. The two smaller buildings were formerly latrines, and need to be decommissioned as part of demolition. The shelter building is not insulated and the electrical source was disconnected almost twenty years ago when a fourth building was lost in a fire. The Park and Recreation Commission would like to have the buildings demolished, for the safety of those using the site, and the neighbors. Youth who live in the area continue to build structures, including a small dock, that would also need to be removed for safety. In place of the shelter, an open air picnic shelter would be built, with picnic tables installed on the concrete base to minimize vandalism. This area would be available for use by trail walkers as well as any programs offered by Park and Recreation or other Needham organizations. Past vandalism has included use of flammable materials, a danger to nearby homes.

The Rosemary Trail project was initially developed within the Trails Master Plan and is the fourth of four major trail projects to be moved forward. The original scope and estimates was developed in 2008 by Beals+Thomas, and they updated the estimate in subsequent years. The scope has been altered to meet the current plans of the property. The entrance to the trail from the Rosemary parking lot is being repaired during the Rosemary Recreation Complex project. It is recommended that projects along the trail be combined into a group of projects for the Student Conservation Association, including rebuilding a bridge crossing the brook. The final project would involve improvements on the cart path to alleviate wet conditions, particularly when an emergency vehicle needs to access the property. The trail will not be ADA accessible.

Permits would be required from the Conservation Commission for the trail work, and demolition permits would be required, as well as for the installation of a pre-fab shelter for the picnic area.

On-going maintenance can primarily be done by volunteers, with minor assistance from DPW Parks and Forestry.

The estimates are based on recent Needham projects.

Town of Needham
Capital Improvement Plan
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Capital Project Request

Project Title: Walker Pond Improvements		Fiscal Year: 2023	
Purpose:	Construction	Classification:	Land
Department:	Park and Recreation	Status:	Informational Only Details Incomplete
Partners:	Conservation Department	Supports:	Culture and Leisure
		Useful Life:	More than twelve (12) years
Parameters			Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?			Yes
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			No
6. If funded, will additional permanent staff be required?			No
7. If funded, will the operating budget need to be increased to cover operating expenses?			Yes
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?			Yes
10. If the project is NOT funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			Yes
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?			Yes
18. Will any other department be required to provide assistance in order to complete the project?			Yes
19. If funded, will this project increase the operating expense for any other department?			No
Project Cost:	\$0	How was the Project Cost Determined:	No Estimate Has Been Determined
Budget Impact:	May increase annual operating expenses between \$5,001 and \$25,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$0							
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$0							
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

\$0

Capital Project Request

Project Title: Walker Pond Improvements

Fiscal Year: 2023

Project Description and Considerations

In Fall 2017, the Conservation Department has begun a study of Walker Pond with the firm ESS. The pond is under the jurisdiction of the Park and Recreation Commission, and seven of the abutters are also considered owners for the portions adjacent to their properties. The Conservation Department has been working with the neighbors who would like to see the quality of the water improved.

In 1996, the Park and Recreation Department, with funding from a state grant and neighbor donations undertook a hydroaking project, removing about 2/3rds of the lily growth in the pond. The deep roots were eliminating areas for fish and wildlife to thrive. This project required permits from the Conservation Commission, DEP, and Army Corps of Engineers. For about five following years, an order of conditions allowed for chemical treatments to follow-up with the clean-out, and keep conditions from the project. The conditions have not returned to the 1990's, but new problems have arisen. The current ESS study will try to determine the problems and causes, and will make recommendations to improve the conditions. The neighbors will provide partial funding.

As the study has not been done as this is written, there is no estimate available. It is likely that the neighbors will seek to have funding earlier than this request.

It is anticipated that permitting may be lengthy, as it was for the past project.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Improvements to Memorial Park Building **Fiscal Year:**

Purpose:	Construction	Classification:	Building	Status:	Partially Funded Request
Department:	Memorial Park			Supports:	Culture and Leisure
Partners:	Board of Selectmen, PPBC, DPW, Park and Recreation Department			Useful Life:	More than twenty-five (25) years

Parameters	Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	Yes
6. If funded, will additional permanent staff be required?	Yes
7. If funded, will the operating budget need to be increased to cover operating expenses?	Yes
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	Yes
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	Yes
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	Yes
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No
19. If funded, will this project increase the operating expense for any other department?	Yes

Project Cost:	\$5,900,000	How was the Project Cost Determined:	Hired Consultant
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$0							
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$5,500,000	\$5,500,000						
Construction Management	\$100,000	\$100,000						
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$200,000	\$200,000						
Technology Hardware/Software	\$25,000	\$25,000						
Other Expenses	\$75,000	\$75,000						
TOTAL	\$5,900,000	\$5,900,000	\$0	\$0	\$0	\$0	\$0	\$0

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Improvements to Memorial Park Building

Fiscal Year:

\$0

Project Description and Considerations

This is a general submission which will be followed with additional information from the Trustees of Memorial Park, project partners, and Town staff.

Winter Street Architects performed a feasibility study on the Memorial Park Building in 2016, and after design funds were approved at the May 2017 Annual Town Meeting, Winter Street continued to move forward with design documents, under the charge of the PPBC. The design is for a new two-story building which will be fully handicap accessible, and constructed in accordance with the building code. The building will enhance programs held at the park, and promote synergy among the other nearby Town facilities. The building will be a service point for High School athletics and other community activities, while keeping the focus on the site and its history.

The first floor will have spaces for Needham High School home teams to meet, and a separate room for visiting teams. These rooms can be used for other community activities, i.e. Citrus Sale or uniform pick-up. A concession room would be available for use. Restrooms for park users will be rebuilt, and a small number of restrooms will be inside for team use. Storage will be available for DPW Parks and Forestry, as well as groups using the fields at Memorial Park. The second floor will have meeting space for the Trustees and other community groups, as well as a room for larger meetings.

With an increase in use, it is anticipated that there will be additional operating costs for the building, including but not limited to HVAC, custodial care (to be determined if staff or outsourcing), building monitor, and energy.

A recent facility financing plan assumed that the project would be funded by a combination of General Fund debt (\$2 million), CPA funds, other one-time General Fund monies, and some limited outside resources, yet to be determined.

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Capital Project Request

Project Title: Big Belly Trash Cans **Fiscal Year:** 2019

Purpose:	Acquisition	Classification:	Equipment	Status:	New Request
Department:	Public Works - RTS			Supports:	Utilities
Partners:	Town Manager's Office, ITC			Useful Life:	More than eight (8) years

Parameters

Response

1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	Yes
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	No
6. If funded, will additional permanent staff be required?	Total New FTE's: 0
7. If funded, will the operating budget need to be increased to cover operating expenses?	Yes
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	Yes
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	Yes
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	\$100,000	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$0							
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$0							
Construction Management	\$0							
Equipment	\$100,000	\$100,000						
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$100,000	\$100,000	\$0	\$0	\$0	\$0	\$0	\$0

\$0

Capital Project Request

Project Title: Big Belly Trash Cans

Fiscal Year: 2019

Project Description and Considerations

The Town has been investigating long term strategies for handling public litter. Over the past year, the DPW has met with Big Belly Solar, Inc. to review a Town-wide deployment of their waste management receptacles. These receptacles have two compartments, one for recycling and one for trash, with solar powered compactors, and technology that indicates when the receptacles are full.

The Town is pursuing a pilot program to deploy these receptacles at two recreational facilities around Town. This deployment will include 12 Big Belly trash and recycling receptacles. Eleven receptacles will be solar powered compactors and one will be a solar powered non-compactable receptacle. The solar powered compactors will be deployed in areas of high volumes of trash and the non-compactable receptacle will be deployed in areas that are not prone to substantial trash generation. This deployment is being done in accordance with a study conducted by Big Belly.

The receptacles will be purchased by the Town and their effect on reducing the issues of overflowing trash containers and minimizing odors will be monitored. There is a potential in the out years to either purchase or lease additional Big Belly receptacles. The 12 trash and recycling receptacles being purchased under this pilot program can be incorporated in a lease program in the out years.

- 4. ITC is required because of the software included and the possibility of Wi-Fi capability.
- 7. Additional maintenance funds may be required, estimated at \$1,000 annually.
- 14. The Town receives numerous complaints of public litter.
- 16. These trash and recycling receptacles will be permanently installed at each location.

Town of Needham
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Capital Project Request

Project Title: **RTS Efficiency Study & Master Plan** **Fiscal Year:** **2023**

Purpose:	Feasibility Study	Classification:	Infrastructure	Status:	Informational Only Details Incomplete
Department:	Public Works - RTS			Supports:	Utilities
Partners:				Useful Life:	More than eighteen (18) years

Parameters

Response

1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	No
6. If funded, will additional permanent staff be required?	No
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost: _____ How was the Project Cost Determined: _____

Budget Impact: _____

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$0							
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$0							
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

\$0

Capital Project Request

Project Title: RTS Efficiency Study & Master Plan

Fiscal Year: 2023

Project Description and Considerations

The efficiency study will include:

- A review of the RTS operations as a whole (recycling, Municipal Solid Waste (MSW), composting, material handling, and the landfill), and as they relate to the site operations.
- A review of traffic patterns and safety matters.
- A financial evaluation of the operations in terms of operating and maintenance costs, disposal costs, transportation costs, and revenue. The financial evaluation will highlight the potential to increase revenues or reduce costs through efficiencies.
- A meeting with the supervisors and foremen of the operation, and a review of staffing and equipment levels.
- A review of MSW, recycling acceptance and handling practices, and volumes (quantities). This may be further segregated into residential and commercial wastes.
- A review of the existing site layout.

Findings from the review will be presented in a draft report format. Practices and efficiencies may be compared to other municipal operations when appropriate. Based on review of the overall operations and site layout, the department will make recommendations for potential efficiency improvements.

Building upon this efficiency study and the completed structural analysis, the department shall develop three conceptual master plan options that incorporate both efficiency improvements and address structural needs. An independent estimator shall then review all three options and calculate planning level costs. Lastly, the department will select the preferred option to pursue based on needs and costs.

Town of Needham
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Capital Project Request

Project Title: RTS Employee Trailer **Fiscal Year:** 2023

Purpose:	Acquisition	Classification:	Building	Status:	Informational Only Details Incomplete
Department:	Public Works - RTS			Supports:	Utilities
Partners:				Useful Life:	More than eighteen (18) years

Parameters

Response

1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	
3. Does this project require any permitting by any Town or State agency?	Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	Yes
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	Yes
6. If funded, will additional permanent staff be required?	No
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	Yes
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:		How was the Project Cost Determined:	
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$0							
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$0							
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

\$0

Capital Project Request

Project Title: RTS Employee Trailer

Fiscal Year: 2023

Project Description and Considerations

This informational request is for a new employee trailer at the RTS. The current employee lunch/break room is a donated, second-hand trailer located in an isolated area of the facility. The restrooms in this trailer are not ADA compliant and there are no shower facilities or washing machines on site for staff working in an extremely dirty environment.

In the future, these quarters will need to be replaced in order to provide adequate working conditions for RTS staff. The new employee trailer shall be ADA accessible and feature shower facilities as well as laundry.

The plumbing for this new employee trailer poses a significant cost in terms of reconfiguring the sewer at the RTS.

3. This project will have to go to the Planning Board for Site Plan Review and will be subject to Conservation Commission permitting requirements.
4. The technology in the current employee trailer includes a cable television. The RTS will communicate with ITC in terms of technology needed in the new employee trailer.
5. This request is for a new employee trailer and the RTS will communicate with the Building Maintenance division to discuss future cleaning service requirements.
18. Other departments that may be required to provide assistance in order to complete this project include Engineering, Building Maintenance, ITC, Sewer and Water.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: RTS Horizontal Grinder (Tracked)		Fiscal Year: 2020	
Purpose:	Acquisition	Classification:	Equipment
Department:	Public Works - RTS	Status:	Informational Only Details Incomplete
Partners:		Supports:	Utilities
		Useful Life:	More than eight (8) years
Parameters			Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?			No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			No
6. If funded, will additional permanent staff be required?			No
			Total New FTE's: 0
7. If funded, will the operating budget need to be increased to cover operating expenses?			Yes
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?			Yes
10. If the project is NOT funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			No
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			No
19. If funded, will this project increase the operating expense for any other department?			No
Project Cost:	\$750,000	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$0							
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$0							
Construction Management	\$0							
Equipment	\$750,000		\$750,000					
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$750,000	\$0	\$750,000	\$0	\$0	\$0	\$0	\$0

\$0

Capital Project Request

Project Title: RTS Horizontal Grinder (Tracked)

Fiscal Year: 2020

Project Description and Considerations

The RTS has had a Vermeer horizontal grinder in its inventory for more than 10 years. This grinder is unsafe, does not operate consistently, and is slated to be disposed of given its condition.

To provide the staff with the necessary equipment to ensure seamless operations at the compost operation, a new tracked (not wheeled) horizontal grinder is necessary. The grinder will provide the staff the means to control the inflow of brush, limbs, and logs. This will provide for considerably more square footage by negating the need to store huge amounts of the aforementioned materials on site which take up lots of necessary space at the present time. Having a new grinder will allow these materials to be processed at least weekly, freeing up valuable space for the layout of more windrows. The new grinder will play a significant role in both the efficiency and increased productivity of operation.

The new grinder will also provide the necessary equipment in the event of a catastrophic wind or storm event. Should (or when) such an event occur in town, having a horizontal grinder on site that is sized to handle both the day to day operations of the compost area and provide the processing power to handle copious amounts of local construction demolition from a catastrophic storm is prudent planning and will provide the Town flexibility to deal with this debris in a timely fashion.

The grinder will assist in the more efficient layout of the RTS' composting site. Having the grinder on site will allow for better control of incoming brush, limbs, and logs and keep open and clear valuable square footage that can be used for the layout of additional compost windrows.

7. If funded, the operating budget will need to be increased to cover operating expenses as the costs to service the grinder are presently not in the budget.

9. If funded, this project will require ongoing assistance from vendors at an additional expense to the Town which is not already budgeted.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: RTS Property Improvements		Fiscal Year: 2019			
Purpose:	Construction	Classification:	Infrastructure	Status:	Amended Request from the Prior CIP
Department:	Public Works - RTS			Supports:	Utilities
Partners:	Public Facilities Construction			Useful Life:	More than eighteen (18) years
Parameters				Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?					No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?					No
3. Does this project require any permitting by any Town or State agency?					Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?					No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?					Yes
6. If funded, will additional permanent staff be required?				Total New FTE's:	0
7. If funded, will the operating budget need to be increased to cover operating expenses?					No
8. If funded, will this project lower the requesting Department's operating costs?					No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?					No
10. If the project is NOT funded, will current Town revenue be reduced?					No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?					No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?					No
13. Is this a request in response to a Court, Federal, or State order?					No
14. Is this a request in response to a documented public health or safety condition?					No
15. Is this a request to improve or make repairs to extend the useful life of a building?					Yes
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?					Yes
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?					No
18. Will any other department be required to provide assistance in order to complete the project?					Yes
19. If funded, will this project increase the operating expense for any other department?					No
Project Cost:	\$912,000	How was the Project Cost Determined:	Industry References		
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000				

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$130,000	\$130,000						
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$542,000	\$515,000	\$27,000					
Construction Management	\$0							
Equipment	\$230,000			\$110,000	\$120,000			
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$10,000			\$10,000				
TOTAL	\$912,000	\$645,000	\$27,000	\$120,000	\$120,000	\$0	\$0	\$0

\$0

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: RTS Property Improvements

Fiscal Year:

2019

Project Description and Considerations

This article will be used to fund improvements to the Recycling & Transfer Station (RTS) facility to increase efficiency, comply with regulatory requirements, and improve the facility function.

Due to a study conducted in 2016 on the condition of the Transfer Station building, the original priority for FY19 has been moved back and taking action to remedy items identified in the report has taken precedence.

FY19

Weston & Sampson conducted a Transfer Station Building Roof Evaluation in April 2016 on the 1998 Transfer Building Structure and outline the following recommendations based on the observed conditions of the structure. Temporary emergency structural repairs were made to address immediate safety concerns in the building.

- New Metal Roof and Purlins
- Clean and Paint Steel Framing
- Re-Support Fire Protection

The Weston & Sampson Transfer Station Building Evaluation conducted in November 2016 on the 1988 Transfer Building Structure identified the following structural concerns that should be addressed.

- Misc. Repairs to the Pre-Engineered Metal Framing
- Clean and Paint Steel Framing
- Re-Support Fire Protection
- Repair Roof Leaks
- Fall Protection/Warning System at Tipping Pit
- Replace Steel Approach at Tipping Pit
- Repair Slab-On-Grade

Design/Engineering \$130,000

Construction \$515,000

FY20

This is for the purchase and installation of two new chain link gates and a chain link fence with privacy slats in the same location as the current security fencing at the RTS.

Construction \$27,000

FY21

This is for the purchase and installation of 300 jersey barriers that will be used to create a barrier between the composting operation and the wetlands. This needs to be done in order for the Town to be compliant with the Negative Determination of Applicability from the Conservation Commission in 2014. The cost referenced is for the purchase of new jersey barriers and transportation. It is possible that the Town may be able to procure used jersey barriers at little or no cost but that will require the Town pay the cost of transportation, which is approximately \$10,000.

Equipment \$110,000

Other Expenses \$10,000

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: RTS Property Improvements

Fiscal Year:

2019

Supplemental Information

FY22

This is for the purchase and installation of two 18' x 10' panels to extend the existing scale which is 40 feet and insufficient to take the accurate weight of the Town's 100 yard open top containers and contractor's larger vehicles. Right now, the Town uses approximate values for these materials but the extended scale will accurately determine the weights of the materials being shipped out of or dropped off at the RTS. Additionally, the current scale is 10 years old as of 2017 and it requires annual maintenance due to excessive wear.

Equipment \$120,000

Future Projects

The Recycling and Transfer Station has grown organically over the years and currently includes seven separate buildings:

1. Transfer station building with customer reception area has been abandoned and is currently being used as storage due to lack of ADA compliance, insufficient barrier to the transfer station, deteriorated bathroom facility, and areas with mold.
2. A new office trailer that is temporary in nature has been installed in front of the transfer station building. This is a temporary solution.
3. 3-Bay garage used for surplus paint and equipment storage and Re-use-it area
4. Employee break trailer with storage and restroom are not ADA compliant
5. REX building garage with Superintendent Office and restroom are not ADA compliant. The garage is not properly insulated or heated.
6. Surplus paint reuse shed and hazardous waste locker
7. 12 foot storage container

Some of the limitations of the current facility include:

- Superintendent's office is isolated from the day-to-day operations and staff activity, making supervision and oversight challenging
- No shower facilities on site for staff working in extremely dirty environment
- Limited secure storage
- Employee lunch/break room is in a donated second-hand trailer located in isolated area of facility

Looking to the future, in order to improve efficiency and oversight of operations, provide adequate working conditions, and provide secure storage, new quarters at the RTS are desperately needed. The new area would combine the functions of five separate storage buildings into one facility attached to the existing transfer station building. The new facility would include: customer service area, staff office, superintendent office, employee lunch/break room, meeting room, restroom, shower facilities, and secure storage area all in a single facility. The new facility would most likely be a three-story addition to the existing transfer station building consisting of secure storage and shower/locker room on the ground level, customer reception and office area on the first floor, and meeting room and employee break room on the second floor. A May 2014 Annual Town Meeting Warrant approved funding for a temporary office trailer to provide adequate customer service, office, and restroom facilities and to bring the superintendent's office into the main operations area. This trailer is intended to be temporary and is situated so as not to interfere with potential transfer station expansion.

3. This project may have to go to the Planning Board for Site Plan Review and may be subject to Conservation Commission permitting requirements.
5. This project involves building improvements to the Transfer Station Building and Roof. The RTS has communicated with Building Maintenance and this division supports the request.
15. This is a request to improve or make repairs to extend the useful life of the Transfer Station Building and Roof.
16. The scale is a below ground device and will be permanently installed at the RTS.
18. The Conservation Department will be required to provide assistance in order to complete the project.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: RTS Stormwater Plan		Fiscal Year: 2020	
Purpose:	Construction	Classification:	Infrastructure
Department:	Public Works - RTS	Status:	Amended Request from the Prior CIP
Partners:		Supports:	Utilities
		Useful Life:	More than eighteen (18) years
Parameters		Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?			No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			No
6. If funded, will additional permanent staff be required?		Total New FTE's:	0
7. If funded, will the operating budget need to be increased to cover operating expenses?			No
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?			No
10. If the project is NOT funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			No
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			No
19. If funded, will this project increase the operating expense for any other department?			No
Project Cost:	\$525,000	How was the Project Cost Determined:	Hired Consultant
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$0							
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$525,000		\$250,000	\$275,000				
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$525,000	\$0	\$250,000	\$275,000	\$0	\$0	\$0	\$0

\$0

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: RTS Stormwater Plan

Fiscal Year: 2020

Project Description and Considerations

The Recycling and Transfer Station (RTS) composting operation is presently under a July 2014 Conservation Commission Negative Determination of Applicability (NDA). This NDA was put in place as a result of adverse impacts to the wetlands from the compost operations. The NDA calls for the mitigation of potential stormwater issues at the site. At the present time, untreated stormwater runoff is entering a perennial stream that feeds the wetlands abutting the composting operations.

In 2016, the Town received funding for the design phase of this project. At the time of the FY19 Capital process, the design phase will not be completed therefore the funding request for the construction phase of this project has been pushed to FY20 when budgetary numbers are available. Preliminary estimates, working with the Town's consultant, Fuss & O'Neill, are above previous estimates. This project has now been broken down into two years due to scope and cost. The Town will continue to work to refine and prioritize elements of this project.

FY20

Area 1 – The construction of a sediment removal structure at the compost area

Construction \$170,000

Area 3 – A new detention basin at the base of the landfill that will control stormwater runoff from the materials processing area and the road behind the salt shed

Construction \$80,000

FY21

Area 2 – The stormwater management collection system for the proposed paving of the road behind the salt shed

Construction \$275,000

Future Projects

Area 4 – The re-grading of the materials processing area; this re-grading will require all stormwater runoff to be shifted away from the wetlands

3. This project will have to go to the Planning Board for Site Plan Review and will be subject to Conservation Commission permitting requirements.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Drain System Improvements - Water Quality (EPA)		Fiscal Year: 2019	
Purpose:	Construction	Classification:	Infrastructure
Department:	Public Works - Drains	Status:	Amended Request from the Prior CIP
Partners:		Supports:	Utilities
		Useful Life:	More than twenty-five (25) years

Parameters	Response		
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No		
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No		
3. Does this project require any permitting by any Town or State agency?	Yes		
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No		
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	No		
6. If funded, will additional permanent staff be required?	Total New FTE's: 0	No	
7. If funded, will the operating budget need to be increased to cover operating expenses?	No		
8. If funded, will this project lower the requesting Department's operating costs?	No		
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No		
10. If the project is NOT funded, will current Town revenue be reduced?	No		
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No		
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	Yes		
13. Is this a request in response to a Court, Federal, or State order?	No		
14. Is this a request in response to a documented public health or safety condition?	No		
15. Is this a request to improve or make repairs to extend the useful life of a building?	No		
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No		
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No		
18. Will any other department be required to provide assistance in order to complete the project?	No		
19. If funded, will this project increase the operating expense for any other department?	No		
Project Cost:	\$3,586,500	How was the Project Cost Determined:	Hired Consultant
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$25,000	\$25,000						
Design/Engineering	\$126,500			\$126,500				
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$3,435,000	\$2,400,000			\$1,035,000			
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$3,586,500	\$2,425,000	\$0	\$126,500	\$1,035,000	\$0	\$0	\$0

\$0

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Drain System Improvements - Water Quality (EPA)

Fiscal Year:

2019

Project Description and Considerations

The Town entered into a Memorandum of Understanding (MOU) with the Environmental Protection Agency (EPA) to commence a Town-wide investigation of stormwater discharge to address the discharge of pollutants through stormwater into the Charles River Basin and other water bodies. Incorporated into this plan are improvements to the Stormwater Drainage System to upgrade the quality of the water discharged into the Charles River in Needham. This request is to support action items identified in the MOU.

When the 2003 EPA National Pollutant Discharge Elimination System (NPDES) Stormwater Discharge Permit took effect, it incorporated several requirements identified in the MOU. There were a number of projects proposed to manage stormwater quality effectively. The second permit to be issued by the EPA was submitted in April 2016 and will take effect July 1, 2018, pending litigation. This request for funding increased from the previous year because during the design process, it was determined that the depth of the sediment that needs to be removed is greater than what was originally estimated. This has increased the cubic yardage of sediment product that needs to be disposed.

Funding for the construction portion of the Rosemary Lake Sediment Removal was delayed a year from FY18 to FY19, per agreement amongst Town boards and commissions. Analysis of Wildwood Drive pond was added to FY19 to address concerns over the condition of the pond and its capacity to handle Town stormwater.

FY19

Rosemary Lake Sediment Removal

Construction \$2,400,000

60 Wildwood Drive Pond Analysis

Planning/Feasibility \$25,000

FY20

No funding requested

FY21

The Town Reservoir Sediment Removal

Design/Engineering \$126,500

FY22

The Town Reservoir Sediment Removal

Construction \$1,035,000

FY23

No funding requested

Future Projects

Action Items from Watershed Management Plan funded in FY15

Design and Construction

3. Conservation Commission, State and Federal permitting may be required for dredging.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Sewer Main Extensions in Zone I and II		Fiscal Year: 2019			
Purpose:	Construction	Classification:	Infrastructure	Status:	Amended Request from the Prior CIP
Department:	Public Works - Sewer			Supports:	Utilities
Partners:				Useful Life:	More than twenty-five (25) years
Parameters				Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?					No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?					No
3. Does this project require any permitting by any Town or State agency?					Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?					No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?					No
6. If funded, will additional permanent staff be required?				Total New FTE's:	0
7. If funded, will the operating budget need to be increased to cover operating expenses?					Yes
8. If funded, will this project lower the requesting Department's operating costs?					No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?					No
10. If the project is NOT funded, will current Town revenue be reduced?					No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?					No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?					No
13. Is this a request in response to a Court, Federal, or State order?					No
14. Is this a request in response to a documented public health or safety condition?					Yes
15. Is this a request to improve or make repairs to extend the useful life of a building?					No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?					No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?					No
18. Will any other department be required to provide assistance in order to complete the project?					No
19. If funded, will this project increase the operating expense for any other department?					Yes
Project Cost:	\$690,000	How was the Project Cost Determined:	Industry References		
Budget Impact:	May increase annual operating expenses between \$5,001 and \$25,000				

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$40,000	\$40,000						
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$650,000	\$650,000						
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$690,000	\$690,000	\$0	\$0	\$0	\$0	\$0	\$0

\$0

Capital Project Request

Project Title: Sewer Main Extensions in Zone I and II

Fiscal Year: 2019

Project Description and Considerations

There are eight homes in Needham that need to be prioritized for sewer service connection because they are within Massachusetts Department of Environmental Protection's (MassDEP) Zone II areas. This project is to provide sewer services to homes that presently have no sewer service but are adjacent to the public water supply well field. These homes are being looked at as part of a future sewer main extension/service connections project.

The Zone I and Zone II aquifer protection area for the Charles River Well No. 1 encompasses an area that includes private septic systems. Zone I, as defined by MassDEP, includes land within the protective 400 ft. radius around an existing or potential public water supply well or well field. Zone II includes the area of an aquifer that, given the most severe pumping and recharge conditions that can be realistically anticipated, would potentially be affected by nearby septic systems. It is bounded by the groundwater divides which result from pumping the well and by the contact of the aquifer with less permeable materials such as till or bedrock. (Note: these private systems predate the Zone I and II requirements by MassDEP and Needham Zoning Bylaws, Section 3.4.6 (b)).

All three of Needham's wells are located in an area that is vulnerable to contamination from nearby septic systems. Extending the sewer main will enable access to homes within Zones I & II and reduce the risk of contamination.

The FY19 construction project proposed was designed in FY17 and includes the installation of a new sewage pumping station and extension of the sewer main in Winding River Road. With this new service, the Town will provide sewer service for 909 Charles River Street to a critical portion of Winding River Road.

This service will extend 712 ft. up Winding River Road. The new sewer main will pick up eight homes that are on septic, seven of which are on Winding River Road. These improvements may be subject to a betterment fee.

FY19

Engineering and Construction \$690,000

3. Conservation Commission permitting may be required for site work; Board of Health permitting for septic system abandonment.

7. Additional operating budget funds will be required after this project is constructed in order to operate the new main which include maintenance costs of the pumps, mechanicals seals, valves, wet cleanings, and other maintenance costs. The increased electrical and maintenance costs are not anticipated to exceed \$10,000 in 2017 dollars.

14. All of Needham's wells are located in an area that is vulnerable to contamination from nearby septic systems.

19. An increase in electrical costs will require additional budget funds from the Needham Electric Light and Gas Program. The increased electrical and maintenance costs are not anticipated to exceed \$10,000 in 2017 dollars.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Sewer Main Replacement **Fiscal Year:** 2019

Purpose:	Construction	Classification:	Infrastructure	Status:	Amended Request from the Prior CIP
Department:	Public Works - Sewer			Supports:	Utilities
Partners:				Useful Life:	More than twenty-five (25) years

Parameters

Response

1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	No
6. If funded, will additional permanent staff be required?	No
Total New FTE's:	0
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	\$11,280,000	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$330,000	\$330,000						
Design/Engineering	\$1,950,000		\$1,950,000					
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$9,000,000			\$9,000,000				
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$11,280,000	\$330,000	\$1,950,000	\$9,000,000	\$0	\$0	\$0	\$0

\$0

Capital Project Request

Project Title: Sewer Main Replacement

Fiscal Year: 2019

Project Description and Considerations

The Greendale Avenue/Route 128 sewer interceptor is in need of rehabilitation/replacement. The existing sewer line has been determined to be in the process of deteriorating and in need of rehabilitation/replacement.

This request is for replacing or relining 12,000 feet (2.25 miles) of 18 inch reinforced concrete gravity sewer main running through Town property in the right of way from Greendale Avenue near Cheney Street towards Route 128, along Route 128 right of way, to Great Plain Avenue. This work is on an interceptor sewer which is a trunk sewer that collects and conveys waste water from numerous sewer lines.

Costs have increased since the previous request because this is for the entire length of interceptor sewer from Cheney Street to Great Plain Avenue as opposed to the original request which was just Parcel 74. A feasibility study was added as part of the increased scope.

FY19

Feasibility Study \$330,000

FY20

Engineering \$1,950,000

FY21

Construction Phase I \$9,000,000

FY22

No Funding Requested

FY23 Informational

Sewer replacement under Route 128 at Great Plain Avenue (horizontal directional drilling)

3. MWRA permitting may be required for repair work.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Sewer Pump Station Improvements/Replacement		Fiscal Year: 2020	
Purpose:	Construction	Classification:	Infrastructure
Department:	Public Works - Sewer	Status:	Amended Request from the Prior CIP
Partners:		Supports:	Utilities
		Useful Life:	More than twenty-five (25) years
Parameters		Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?			No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			No
6. If funded, will additional permanent staff be required?		Total New FTE's:	0
7. If funded, will the operating budget need to be increased to cover operating expenses?			No
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?			No
10. If the project is NOT funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			No
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			No
19. If funded, will this project increase the operating expense for any other department?			No
Project Cost:	\$5,005,500	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$545,000		\$95,000		\$345,000		\$105,000	
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$4,460,500		\$535,000			\$3,370,500	\$555,000	
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$5,005,500	\$0	\$630,000	\$0	\$345,000	\$3,370,500	\$660,000	\$0

\$0

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Sewer Pump Station Improvements/Replacement

Fiscal Year: 2020

Project Description and Considerations

As part of the Wastewater System Master Plan, several of the wastewater pumping stations were evaluated to assess their physical condition and capacity, and to evaluate current and future flow projections. The Master Plan recommended that at least 7 of the 9 stations be upgraded. There are 4 stations left to be addressed, 1 of which was already funded in FY18 and the remaining 3 are in the 5-year Capital Plan.

Canister pump stations at Lake Drive and Cooks Bridge are either at or beyond their design life. Constant maintenance and emergency shutoffs occur more frequently and require greater amounts of personnel time and emergency funds to keep running.

FY19

No Funding Requested

FY20

Lake Drive

Design/Engineering \$95,000

Construction \$535,000

FY21

No Funding Requested

FY22

Cooks Bridge

Design/Engineering \$345,000

FY23

Cooks Bridge

Construction \$3,370,500

Future Projects

Warren Street

Design/Engineering \$105,000

Construction \$555,000

3. Conservation Commission permitting may be required for site work.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Sewer Service Connections		Fiscal Year: 2020			
Purpose:	Construction	Classification:	Infrastructure	Status:	Informational Only Details Incomplete
Department:	Public Works - Sewer			Supports:	Utilities
Partners:				Useful Life:	More than twenty-five (25) years
Parameters				Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?					No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?					No
3. Does this project require any permitting by any Town or State agency?					No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?					No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?					No
6. If funded, will additional permanent staff be required?				Total New FTE's:	0
7. If funded, will the operating budget need to be increased to cover operating expenses?					No
8. If funded, will this project lower the requesting Department's operating costs?					No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?					No
10. If the project is NOT funded, will current Town revenue be reduced?					No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?					No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?					No
13. Is this a request in response to a Court, Federal, or State order?					No
14. Is this a request in response to a documented public health or safety condition?					No
15. Is this a request to improve or make repairs to extend the useful life of a building?					No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?					No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?					No
18. Will any other department be required to provide assistance in order to complete the project?					No
19. If funded, will this project increase the operating expense for any other department?					No
Project Cost:	\$200,000	How was the Project Cost Determined:	In-House Estimate		
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000				

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$0							
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$200,000		\$50,000	\$50,000	\$50,000	\$50,000		
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$200,000	\$0	\$50,000	\$50,000	\$50,000	\$50,000	\$0	\$0

\$0

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Sewer Service Connections

Fiscal Year: 2020

Project Description and Considerations

There are 108 homes with access to sewer that are not connected to the Town Sewer System because they have chosen not to. The purpose of this request is to provide the lateral sewer line from the sewer main to the property line so that homeowners can connect should they choose to or should their septic system fail. The lateral sewer line is to be added prior (at least one year) to a road reconstruction/paving project. The cost for these service installations are typically not included in road construction estimates. In the case of Chapter 90 Projects, these are not considered as a reimbursement eligible expense. These expenses are included in local road reconstruction estimates. There is a corresponding request for water service connections.

This program has been put on hold so that the division could re-evaluate the intention of this article. The funding for this article was initially requested for the installation of sewer lateral lines in roads that were anticipated to be renovated in the near future, so should the homeowner choose to convert to Town sewer, the lateral would be available.

The reality has been that when homeowners have decided to go onto Town sewer it has been when their house has been sold, and with the high number of tear downs, the location of the sewer laterals the Town has installed are no longer beneficial for the new house's layout.

Past Projects

2013 - Installed 14 new sewer laterals (408.5' of pipe)

2014 - No appropriation was requested

2015 - Installed sewer laterals as part of the Great Plain Avenue sewer replacement

2016 - Installed sewer laterals as part of the Great Plain Avenue sewer replacement

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Sewer System Inflow & Infiltration Removal		Fiscal Year: 2019			
Purpose:	Construction	Classification:	Infrastructure	Status:	Amended Request from the Prior CIP
Department:	Public Works - Sewer			Supports:	Utilities
Partners:				Useful Life:	More than twenty-five (25) years
Parameters					Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?					No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?					No
3. Does this project require any permitting by any Town or State agency?					No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?					No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?					No
6. If funded, will additional permanent staff be required?					No
					Total New FTE's: 0
7. If funded, will the operating budget need to be increased to cover operating expenses?					No
8. If funded, will this project lower the requesting Department's operating costs?					No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?					No
10. If the project is NOT funded, will current Town revenue be reduced?					No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?					No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?					No
13. Is this a request in response to a Court, Federal, or State order?					No
14. Is this a request in response to a documented public health or safety condition?					No
15. Is this a request to improve or make repairs to extend the useful life of a building?					No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?					No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?					No
18. Will any other department be required to provide assistance in order to complete the project?					No
19. If funded, will this project increase the operating expense for any other department?					No
Project Cost:	\$1,805,000	How was the Project Cost Determined:	Industry References		
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000				

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$205,000	\$205,000						
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$1,600,000		\$1,600,000					
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$1,805,000	\$205,000	\$1,600,000	\$0	\$0	\$0	\$0	\$0

\$0

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Sewer System Inflow & Infiltration Removal

Fiscal Year:

2019

Project Description and Considerations

In 2016, the Town completed a study that identified areas of inflow and infiltration removal in areas around town over the next ten years. This study was delayed due to low groundwater that made I/I harder to detect. The Town has been undertaking I/I projects using funding from developments. In future years, funding from private developments will be appropriated at Town Meeting.

The Town of Needham, along with numerous other communities, is under Administrative Orders from the Department of Environmental Protection (DEP) to identify and remove Infiltration and Inflow (I/I) in existing sewer systems.

Infiltration is defined as groundwater or storm water runoff that enters the system through deteriorated pipe or manhole structures that need to be repaired.

Inflow is defined as clean, non-septic water, which is introduced to the system. This water is generally produced by residential sump pumps that drain basements. The inflow removal program is being presented separately from the infiltration removal program. Much of this work could address inflow to include extending or expanding the storm drain system to accept groundwater from household sump pumps. Needham's most significant problem is believed to be from these private sources. The program will initiate with an education and information campaign to inform and prepare the homeowners as to the nature of the problem. The cost impacts to the community, the legal implications, the likely solutions, the responsibilities of the homeowner, and the potential enforcement actions by the Town, the Massachusetts Water Resource Authority (MWRA), the DEP and the Environmental Protection Agency (EPA) will need to be communicated. The preliminary engineering will likely take the form of smoke testing and flooded dye testing to determine any direct or indirect interconnections between the sewer and the storm drain system. It also includes a door-to-door investigation of households to determine where violations are occurring. Typical violations include, but are not limited to, sump pumps or open clean-outs where non-sanitary flow is discharging directly to the sewer system as well as foundation drains, yard drains, roof leaders, and other cross connections.

Cost Benefits of Program:

- Failure to do any mitigation in any of the MWRA communities will cause the overall costs for all participating communities to increase.
- The failure of the Town of Needham to address its I/I while neighboring communities reduce theirs will increase the percentage of the cost to Needham.
- When Needham decreases its I/I the same or better than other participating communities its percentage of cost will stay the same or decrease.
- The Town must keep up with its I/I mitigation in order to avoid disproportionate increases in cost and to comply with MassDEP's administrative order.

FY19

This request is for the design of the removal of the remaining locations of identified infiltration in the system as indicated in the 2016 BETA report.

Design/Engineering \$205,000

FY20

This request is for the removal of the remaining locations of identified infiltration in the system as indicated in the 2016 BETA report.

Construction \$1,600,000

FY21 - FY23

The focus of this article has historically been on infiltration. Based on changes in the industry, the focus in the future will be on inflow. When the Town has developed its plan on how to tackle inflow, this information will be added to this article.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Birds Hill Water Tank Improvements		Fiscal Year: 2019	
Purpose:	Design/Engineering	Classification:	Infrastructure
Department:	Public Works - Water	Status:	Amended Request from the Prior CIP
Partners:		Supports:	Utilities
		Useful Life:	More than eighteen (18) years
Parameters		Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?			No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?			No
3. Does this project require any permitting by any Town or State agency?			No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?			No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?			No
6. If funded, will additional permanent staff be required?		Total New FTE's:	0
7. If funded, will the operating budget need to be increased to cover operating expenses?			No
8. If funded, will this project lower the requesting Department's operating costs?			No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?			No
10. If the project is NOT funded, will current Town revenue be reduced?			No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			No
13. Is this a request in response to a Court, Federal, or State order?			No
14. Is this a request in response to a documented public health or safety condition?			No
15. Is this a request to improve or make repairs to extend the useful life of a building?			No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			Yes
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?			No
18. Will any other department be required to provide assistance in order to complete the project?			No
19. If funded, will this project increase the operating expense for any other department?			No
Project Cost:	\$340,000	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$65,000	\$65,000						
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$275,000	\$275,000						
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$340,000	\$340,000	\$0	\$0	\$0	\$0	\$0	\$0

\$0

Capital Project Request

Project Title: Birds Hill Water Tank Improvements

Fiscal Year: 2019

Project Description and Considerations

The purpose of the water tank located at Birds Hill is to maintain proper operating system pressure of the Town's municipal water distribution system. The method used for filling the tank is through one central pipe at the bottom of the tank. This is also how the tank is drained. The movement of water is predominately at the bottom of the tank. This tank has a 100 ft. diameter foundation and it is 45 ft. in elevation. The intention of this request is to install a mixing valve that will move water throughout the tank. This movement will assist in maintaining chlorine levels inside the tank. This will assure improved water quality.

This funding request increased based on a revised quote that the department received.

FY19

Design/Engineering \$65,000

Construction \$275,000

16. The mixing valve will be permanently installed at the Birds Hill Water Tank.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Fire Flow Improvements **Fiscal Year:** 2020

Purpose:	Construction	Classification:	Infrastructure	Status:	Informational Only Details Incomplete
Department:	Public Works - Water			Supports:	Utilities
Partners:				Useful Life:	More than twenty-five (25) years

Parameters

Response

1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	No
6. If funded, will additional permanent staff be required?	Total New FTE's: 0
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	Yes
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	\$2,940,000	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$540,000		\$540,000					
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$2,400,000			\$2,400,000				
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$2,940,000	\$0	\$540,000	\$2,400,000	\$0	\$0	\$0	\$0

\$0

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Fire Flow Improvements

Fiscal Year: 2020

Project Description and Considerations

In 2016, the Town received funding for a feasibility study which explored the issue of water pressure in the Tower Hill and Birds Hill areas. The goal is to create a high pressure zone in these two areas, potentially supplied by water booster stations. The design/engineering and construction requests have been pushed to FY20 and FY21 in order to allow for a detailed analysis of the final report from this study. The FY20 and FY21 estimates provided are based upon a water system report and may be altered depending upon which option the Town decides to pursue.

FY20

Design/Engineering \$540,000

FY21

Construction \$2,400,000

14. The water pressure in these areas has the potential to be a public health or safety concern, specifically for the Fire Department.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Water Distribution System Improvements **Fiscal Year:** 2019

Purpose:	Construction	Classification:	Infrastructure	Status:	Amended Request from the Prior CIP
Department:	Public Works - Water			Supports:	Utilities
Partners:				Useful Life:	More than twenty-five (25) years

Parameters

Response

1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	No
6. If funded, will additional permanent staff be required?	No
Total New FTE's:	0
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost: **\$6,420,000** How was the Project Cost Determined: In-House Estimate

Budget Impact: Negligible impact on the annual operating expenses less than \$5,000

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$140,000		\$40,000		\$100,000			
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$6,280,000	\$830,000	\$4,600,000	\$390,000		\$460,000		
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$6,420,000	\$830,000	\$4,640,000	\$390,000	\$100,000	\$460,000	\$0	\$0

\$0

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Water Distribution System Improvements

Fiscal Year: 2019

Project Description and Considerations

Water System Rehabilitation

Under the Water System Rehabilitation Program, the Town's water infrastructure is continually analyzed to assess functionality and performance, and to identify areas in need of repair. Water infrastructure requires ongoing attention and periodic replacement, and portions of the Town's water infrastructure are 75+ years old and approaching the end of their useful life. A diligent rehabilitation program encompassing maintenance, repair, and replacement ensures a continual supply of water to the public. The Department of Public Works prioritizes replacement of water pipes based upon pipe condition, water break history, and adequacy of water flow to fire hydrants.

In FY18, all projects were pushed out a year on account of drainage work that had to be done on Greendale Avenue as the existing water line had lead joints that were susceptible to breakage during construction of the drainage pipe underneath it. This could not have been foreseen because the lead joints were not identified on the Town records.

FY19

Bennington Street /High Street to Concord Street (unlined)
Country Way/ Replace (1,200lf) of 8" main (unlined)

Construction \$830,000

FY20

Thorpe Road/Webster Street to End New 8" (330lf)
Mills Road/ Sachem Road to Davenport Avenue New 8" (500lf)
Mayo Avenue/Harris Avenue to Great Plain Avenue New 8" (1060lf)

Design/Engineering \$40,000

FY21

Thorpe Road/ Mills Road/ Mayo Avenue (unlined)
Mills Road/ Sachem Road to Davenport Avenue New 8" (500lf)
Mayo Avenue /Harris Avenue to Great Plain Avenue New 8" (1060lf) (unlined)

Construction \$390,000

FY22

Kingsbury Street/ Oakland Avenue to Webster Street 8" (1,500lf)
Oakland Avenue/ May Street to Highland Avenue 8" (1,100lf)

Design/Engineering \$100,000

FY23

Kingsbury Street/ Oakland Avenue to Webster Street 8" (1,500lf)
Oakland Avenue / May Street to Highland Avenue 8" (1,100lf) (unlined)

Construction \$460,000

Capital Project Request

Project Title: Water Distribution System Improvements

Fiscal Year:

2019

Supplemental Information

Water Main Replacement

This request is to replace a total of 11,500 linear feet of 14" water main. The existing water line dates from 1936-1939 and is cast iron with bitumastic or coal tar liner. The water quality in areas serviced by this line is a concern as the lining of these pipes breaks down over time causing discoloration in the water. In 2008, the Town began addressing areas served by this type of piping which at the time was approximately 19,000 linear feet. This work was completed over the subsequent years, extending from Charles River Street, to Pine Street, to Central Avenue, to Marked Tree Road and a section between Oak Street and Chestnut Street, to School Street.

The 14" water main was relined from the Charles River Water Treatment Facility to Grove Street. In 2010, the second phase of this project replaced the 14" water main with a new 16" water main extending from Grove Street to Central Avenue. In FY16, the Town replaced the water main in Oak Street from Maple Street to Chestnut Street and in Chestnut Street from Oak Street to School Street.

The current project will be replacing a 14" water main with a new 16" water main. This project includes replacing the pipe and reconstructing the road.

In FY18, funding was approved for Design/Engineering of the remaining 11,500 linear feet of water main to be replaced from the intersection of Pine Street to Marked Tree Road to Oak Street, and Maple Street.

FY20

Funding is proposed for the construction of the remaining water main.

Construction \$4,600,000

The cost has increased from last year's submission because the Engineering Division has reviewed current construction and engineering costs and has determined that the original amount submitted is insufficient to complete the project as specified. The cost is \$400/linear foot of pipe with a 20% contingency in FY16 dollars. This cost was determined based on recent bids. The engineering is estimated to be 10% of the cost, which is lower than our normal engineering estimate percentage due to the straightforwardness of the project.

State Revolving Fund may be available for this project and the Public Works Department will submit an application.

Future Projects

Fenton Road/West Street to Pershing Road

Greenough Street/Pine Grove Street to Avery Street

Pine Grove Street, Hillside Avenue to exiting 8"

Tower Avenue/Greendale Avenue to Lexington Avenue 800lf of 12"

Rosemary Pond Water Main Replacement

Design/Engineering

3. Conservation Commission permitting may be required for site work.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Water Distribution Study		Fiscal Year: 2023			
Purpose:	Design/Engineering	Classification:	Infrastructure	Status:	Informational Only Details Incomplete
Department:	Public Works - Water			Supports:	Utilities
Partners:				Useful Life:	More than eighteen (18) years
Parameters					Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?					No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?					No
3. Does this project require any permitting by any Town or State agency?					No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?					No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?					No
6. If funded, will additional permanent staff be required?					No
					Total New FTE's: 0
7. If funded, will the operating budget need to be increased to cover operating expenses?					No
8. If funded, will this project lower the requesting Department's operating costs?					No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?					No
10. If the project is NOT funded, will current Town revenue be reduced?					No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?					No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?					No
13. Is this a request in response to a Court, Federal, or State order?					No
14. Is this a request in response to a documented public health or safety condition?					No
15. Is this a request to improve or make repairs to extend the useful life of a building?					No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?					No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?					No
18. Will any other department be required to provide assistance in order to complete the project?					No
19. If funded, will this project increase the operating expense for any other department?					No
Project Cost:	\$222,000	How was the Project Cost Determined:	In-House Estimate		
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000				

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$222,000					\$222,000		
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$0							
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$222,000	\$0	\$0	\$0	\$0	\$222,000	\$0	\$0

\$0

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Water Distribution Study

Fiscal Year: 2023

Project Description and Considerations

This study will provide for an analysis of the Town's water infrastructure. This is partially driven by recommendations that were made in the current master plan that was conducted in 1998, which is coming to its completion of recommendations. Since the last time that the Town studied its water infrastructure, Needham Crossing, formerly the 128 Business Park, has significantly changed with more dense development and different industries and uses.

This request is for developing a new 20 year master plan that will include the following:

- Conduct a thorough asset inventory of the system and conduct a hydraulic analysis.
- Prioritize the rehabilitation and replacement of the asset information related to condition, performance, replacement values, failure modes, probability of failure, and criticality.
- Develop a new 20 year forecast for projected growth.
- Develop an annual estimate of needed reserves and an annual budget.
- Implement the asset management plan.
- Review and revise the current asset management plan.

The purpose of this water distribution study is to evaluate the existing water distribution system and determine the following:

- Identify any deficiencies that exist and determine what repairs should be made to ensure that the system can provide the required flow and pressure.
- Use growth projections from the Town's planning and zoning maps, estimate where and when future growth will occur.
- Use these growth projections, analyze the water system and determine the capacity of the water source, storage, and distribution system.
- Once the capacity is determined, decisions can be made as to when aspects of the water system should be further developed, upsized, or replaced.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Water Service Connections **Fiscal Year:** 2023

Purpose:	Construction	Classification:	Infrastructure	Status:	Amended Request from the Prior CIP
Department:	Public Works - Water			Supports:	Utilities
Partners:				Useful Life:	More than eighteen (18) years

Parameters

Response

1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	No
6. If funded, will additional permanent staff be required?	No
Total New FTE's:	0
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	Yes
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost: **\$200,000** How was the Project Cost Determined: Current Contract

Budget Impact: Negligible impact on the annual operating expenses less than \$5,000

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$0							
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$200,000					\$200,000		
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$200,000	\$0	\$0	\$0	\$0	\$200,000	\$0	\$0

\$0

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Water Service Connections

Fiscal Year: 2023

Project Description and Considerations

The primary purpose of this program is to remove old iron pipe water services that may contain lead from the water distribution system. Old water services are to be replaced prior (at least one year) to a road reconstruction/paving project. System wide, there are approximately 1,220 services that still need to be replaced in the system.

Year Number of Services Replaced

CY07 – 126

CY08 – 170

CY09 – 174

CY10 – 17

CY11 – 145

CY12 – 102

CY13 – 200

CY14 – 152

CY15 – 110

CY16 – 12

CY17 – 62 (as of August)

There was a significant drop in the number of services that were replaced in CY16 because the vendor under contract for these services was released from their contract and the Town had to rebid the work.

There shall be no request for funding in FY19 through FY22 because in FY18, this program was funded \$1,000,000 for use over a 5-year period.

FY23 – \$200,000 for the replacement of approximately 120 services based on the final year of the Town's current contract.

14. Old iron pipe water services in the water distribution system that may contain lead is a documented public health or safety condition.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Water Supply Development **Fiscal Year:** 2019

Purpose:	Construction	Classification:	Infrastructure	Status:	Amended Request from the Prior CIP
Department:	Public Works - Water			Supports:	Utilities
Partners:				Useful Life:	More than twenty-five (25) years

Parameters

Response

1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	No
6. If funded, will additional permanent staff be required?	No
Total New FTE's:	0
7. If funded, will the operating budget need to be increased to cover operating expenses?	Yes
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	Yes
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	\$1,500,000	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$400,000	\$400,000						
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$1,100,000			\$1,100,000				
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$1,500,000	\$400,000	\$0	\$1,100,000	\$0	\$0	\$0	\$0

\$0

Capital Project Request

Project Title: Water Supply Development

Fiscal Year: 2019

Project Description and Considerations

Proposed Well #4

This project would be to install a fourth well at the Charles River Well Field that will provide reliability and redundancy while other wells are taken offline for routine maintenance or repair. There would be no changes to the Town's WMA withdrawal permit. The Well Field is presently at full capacity when all three wells are operational. This fourth well would allow the Town to continue to operate to its full capacity. Previously, when the system was at peak demand and a well was taken offline, the Town had to rely on MWRA water source to meet its daily demands. This redundant well will allow the Town to be more independent even during routine maintenance periods.

FY19

The design/engineering funding request includes DEP and Conservation permitting, exploration and test wells program, as well as design of a pitless well with appurtenance.

Design/Engineering \$400,000

FY21

The construction funding request is for an approximately 100' deep well with control, pump and electrical.

Construction \$1,100,000

3. This project requires permitting from DEP and Conservation.

7. The operating budget will need to be increased in order to cover increased monitoring and maintenance expenses that come with having an additional well.

16. The well equipment is intended to be permanently installed at the location of its use.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request									
Project Title: Combined Project to Renovate Mitchell School & Sustain Hillside as Swing Space						Fiscal Year: 2021			
Purpose:	Feasibility Study	Classification:	Building	Status:	New Request				
Department:	Needham Public Schools			Supports:	Public Education				
Partners:	Massachusetts School Building Authority			Useful Life:	More than twenty-five (25) years				
Parameters								Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?								Yes	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?								No	
3. Does this project require any permitting by any Town or State agency?								Yes	
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?								No	
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?								Yes	
6. If funded, will additional permanent staff be required?						Total New FTE's:	4	Yes	
7. If funded, will the operating budget need to be increased to cover operating expenses?								Yes	
8. If funded, will this project lower the requesting Department's operating costs?								No	
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?								No	
10. If the project is NOT funded, will current Town revenue be reduced?								No	
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?								No	
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?								No	
13. Is this a request in response to a Court, Federal, or State order?								No	
14. Is this a request in response to a documented public health or safety condition?								No	
15. Is this a request to improve or make repairs to extend the useful life of a building?								Yes	
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?								No	
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?								No	
18. Will any other department be required to provide assistance in order to complete the project?								Yes	
19. If funded, will this project increase the operating expense for any other department?								Yes	
Project Cost:	\$750,000	How was the Project Cost Determined:			In-House Estimate				
Budget Impact:	May increase annual operating expenses by more than \$100,000								
Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025	
Planning/Feasibility	\$750,000			\$750,000					
Design/Engineering	\$0								
Land/ROW Acquisition	\$0								
Site Preparation	\$0								
Construction	\$0								
Construction Management	\$0								
Equipment	\$0								
Furniture, Fixtures, and Equipment	\$0								
Technology Hardware/Software	\$0								
Other Expenses	\$0								
TOTAL	\$750,000	\$0	\$0	\$750,000	\$0	\$0	\$0	\$0	
<div style="display: flex; justify-content: space-between;"> \$0 \$0 </div>									

Capital Project Request

Project Title: Combined Project to Renovate Mitchell School & Sustain Hillside as Swing Space

Fiscal Year:

2021

Project Description and Considerations

Constructed in 1950, the Mitchell Elementary School has undergone several additions over the past 50 years, but is in need of total renovation/replacement to address building deficiencies and modernize the learning environment. During construction, the school would need to occupy swing space. The FY19-23 CIP includes separate requests to renovate the Mitchell School and to sustain the Hillside School as swing space. These requests are based on the following project schedules which involve updating the Hillside School to accommodate the Mitchell population (FY25) and then renovating the Mitchell School (to open Sept '28.)

Preliminary Project Schedule - Sustain the Hillside School as Swing Space for Future Town Use:

Feasibility Design: FY21

Design: FY22

Override Ballot Question: FY22

Site Construction: FY23-FY24

Modernized Hillside Opens: July, 2024

Preliminary Project Schedule - Mitchell School Renovation Project:

Feasibility Study: FY25

Debt Exclusion Override: FY25 (April 2015)

Schematic Design/Design Development/ Project Funding Year: FY26

Mitchell Moves to Swing Space: FY27

Construction: FY27 & FY28

New School Opens: September 2028 (FY29)

In reality, however, combining the two projects may make sense from a logistical and funding perspective, and may serve to accelerate the anticipated completion date of the Mitchell School Renovation. This request is to accelerate feasibility study funding for both projects to FY21 to coincide with the original schedule for the Hillside swing space update. If approved by MSBA, a possible schedule for the combined projects could be as follows, based on Needham's experience with the Hillside Renovation Project with MSBA. The total cost of the project may vary from the existing estimates, based on the combined scope.

Potential Schedule -Combined Project

Submit SOI to MSBA (FY20) - Feb '20 - Apr '20)

MSBA Board Meeting to Vote SOI (FY21) - Aug '20

Feasibility (FY21-22)- (Oct '20 STM)

Funding - Oct '20 STM

Bidding Feasibility - Oct '20 - Dec '20

Designer Selection w MSBA - Jan '21 - Mar '21

Feasibility Study - Apr '21 - Jun '22

PDP - Mar '21 - Aug '21

PSR - Sept '21 - Jan '22

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Combined Project to Renovate Mitchell School & Sustain Hillside as Swing Space

Fiscal Year:

2021

Supplemental Information

Schematic Design Mitchell (FY22) - continued
DRT Review - Feb '22
MSBA/DESE Review - May '22 - Jun '22
Submit Schematic Design to MSBA - Jun '22
Needham Boards Approve Schematic Design -Jun '22 - July '22
MSBA Board Meeting - July '22

Project Funding (FY23)
Submit Ballot Question to Secretary of State - Aug '22
Special Town Meeting - Oct '22
Override Ballot Question - Nov '22
Project Funding Agreement - Nov '22 - Dec '22

Design Development (FY23)
Design Development & Review - Dec '22 - May '23
MSBA Review & Approval - May '23 - Jun '23

Hillside Swing Space Updated- CM at Risk (FY23 - FY26)
Design Development & Review - Nov '22 - Jan '23
Construction Docs (Accelerated) - Feb '23 - May '23
Bidding - Jun '23 - Jul '23
Construction (11 months) - Aug '23 - July '24
Mitchell Moves into Hillside Swing Space - Aug '24
Mitchell Occupies Hillside Swing Space - Sep '24 - Jun '26

Construction Documents (FY24 - FY24)
60% Submittal to MSBA - Oct '23
90% Submittal to MSBA - Jan '24
Completion of Construction Docs - Mar '24

Bidding Documents/ Procurement (FY24-FY25)- Apr '24 - July 24

Construction (FY25-27) - Aug '24 - Aug '26

New Building Opens (FY27) - Sept '26

Parameters Addressed:

Project Costs Not Included: Cost of Design and Construction of Combined Project.

Permitting: As required by Town Boards.

Building Improvements: The PPBC and Public Facilities Department support this request.

FTE: Estimate 2.0 Additional Custodians; 2.0 Additional Crossing Guards, Similar to Hillside.

Operating Budget Increase: Improvements to HVAC, electrical system may increase building maintenance expense by more than \$100,000/year. This placeholder estimate to be revised during design process.

Extend Useful Life: See above narrative.

Other Departmental Assistance: PPBC Project Management; Public Facilities Maintenance & Custodial.

Operating Budget Increase for Another Department: See above.

Town of Needham
Capital Improvement Plan
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Capital Project Request

Project Title: Emery Grover Feasibility Study Refresh **Fiscal Year:** 2019

Purpose:	Feasibility Study	Classification:	Building	Status:	New Request
Department:	Needham Public Schools			Supports:	Public Education
Partners:				Useful Life:	More than twenty-five (25) years

Parameters **Response**

1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	No
6. If funded, will additional permanent staff be required?	No
Total New FTE's:	No
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	Yes
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	Yes
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	\$70,000	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$70,000	\$70,000						
Design/Engineering	\$0							
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$0							
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$70,000	\$70,000	\$0	\$0	\$0	\$0	\$0	\$0

\$0

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Emery Grover Feasibility Study Refresh

Fiscal Year:

2019

Project Description and Considerations

The 2005 Facilities Master Plan indicated that the Emery Grover School Administration Building is in need of additional office and storage space, as well as extensive repair and modernization. The needed scope of renovation includes reorganizing office and meeting spaces, making the building fully ADA accessible, removing remaining asbestos and lead paint, and replacing deteriorating systems, including: windows, HVAC, electrical and plumbing. These renovations would allow for a more efficient use of space, as well as full utilization of all four floors and full handicapped accessibility. A capital funding request has been separately submitted for this project, based on the preliminary schedule below:

Preliminary Project Schedule - Renovate/Reconstruct Emery Grover Building at Highland Avenue Location:

Feasibility Study: FY14 (\$30,000)

Feasibility Study Refresh: FY19

Design: FY20 (May '19 ATM)

Project Funding Year: FY21 (May '20 ATM)

Emery Grover Occupies Swing Space: FY21-FY22 (July '20 - Sept '22)

Construction: FY21-FY22

New Building Opens: 9/2022 (FY23)

A feasibility study was conducted in August 2013 by DesignLAB Architects, which identified several options for the building, including: renovation of the existing building, the purchase/renovation of commercial property, and new construction on an alternate Town-owned parcel. This request is to conduct a 'refresh' of the original study, which was conducted five years ago and which must be refreshed to provide useful information for the design project above. The refreshed study should focus exclusively on a project to renovate/reconstruct the Emery Grover Building at the Highland Avenue location, rather than the alternate options of purchasing/renovating commercial property or new construction on another Town-owned parcel. The study should include an updated project budget and schedule, address temporary relocation requirements and identify any building code changes that will be needed to accommodate the projected use. In addition, the study should include the assessment of swing space options including timelines and project budget for the swing space.

Parameters Addressed:

Community Preservation Committee: Funding to be Requested from CPC

Other Departmental Assistance: PPBC Project Management

Town of Needham
Capital Improvement Plan
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Capital Project Request

Project Title: Full Day Kindergarten Space Modifications **Fiscal Year:** 2020

Purpose:	Construction	Classification:	Building	Status:	Same Request from the Prior CIP
Department:	Needham Public Schools			Supports:	Public Education
Partners:				Useful Life:	More than twenty-five (25) years

Parameters **Response**

1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	Yes
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	Yes
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	Yes
6. If funded, will additional permanent staff be required?	No
Total New FTE's:	
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	Yes
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	\$50,000	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$0							
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$20,000		\$20,000					
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$30,000		\$30,000					
TOTAL	\$50,000	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0

\$0

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Full Day Kindergarten Space Modifications

Fiscal Year:

2020

Project Description and Considerations

The School Committee has prioritized the implementation of Full-Day Kindergarten (FDK) in Needham. Based on a preliminary analysis completed in June 2015 (and updated in December 2015), up to five additional classrooms maybe needed in the year of initial implementation, to accommodate the projected population of Kindergarteners at an average class size of 20 students. These classrooms could be provided by re-purposing non-traditional space at each elementary school, such as art/music/world language/technology classrooms, or by re-using available space at the existing Hillside School, or another Town buidling. Based on the accelerated schedule for completing construction of the new Hillside School at Central Avenue, the existing Hillside will become vacant in September 2019, when the new school is completed.

In FY18, Town Meeting appropriated \$50,000 for a space planning/feasibility study that would identify the exact spaces needed for Full Day Kindergarten, and plan for any retrofits required to these spaces. This Feasibility Study is expected to be completed by February 26, 2018. This request is a companion to that study and represents a **placeholder request** for the funding needed to implement the modifications/retrofits identified by the Feasibility Study. The project includes a placeholder estimate of \$30,000 for repairs, to be expended as needed, plus \$20,000 to purchase Kindergarten classroom technology, furniture and/or play equipment. (The budgeted cost of furniture is \$5,000 per classroom.) Other operational expenses associated with Full-Day Kindergarten would be provided through the operating budget.

Parameters Addressed:

Project Costs Not Included: Operational cost of Full-Day Kindergarten implementation to be funded through Operating Budget

Technology: The School Instructional Technology Department is in support of this request. New classroom spaces identified through the Feasibility Study could require a retrofit for classroom technology (including Interactive Whiteboards and Computers), the funding for which would come from this project budget.

Building Improvements: The PPBC and Public Facilities Department support this request. The feasibility study will identify the type, scope and budget of any facility retrofits needed.

Other Departmental Assistance: PPBC or Public Facilities Project Management, depending on the type, scope and budget of any facility retrofits needed.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request										
Project Title: Mitchell School Renovation					Fiscal Year: 2025					
Purpose:	Construction	Classification:	Building	Status:	Same Request from the Prior CIP					
Department:	Needham Public Schools			Supports:	Public Education					
Partners:	Massachusetts School Building Authority			Useful Life:	More than twenty-five (25) years					
Parameters								Response		
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?									Yes	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?									No	
3. Does this project require any permitting by any Town or State agency?									Yes	
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?									Yes	
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?									Yes	
6. If funded, will additional permanent staff be required?				Total New FTE's:	4					Yes
7. If funded, will the operating budget need to be increased to cover operating expenses?									Yes	
8. If funded, will this project lower the requesting Department's operating costs?									No	
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?									No	
10. If the project is NOT funded, will current Town revenue be reduced?									No	
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?									No	
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?									No	
13. Is this a request in response to a Court, Federal, or State order?									No	
14. Is this a request in response to a documented public health or safety condition?									No	
15. Is this a request to improve or make repairs to extend the useful life of a building?									Yes	
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?									No	
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?									No	
18. Will any other department be required to provide assistance in order to complete the project?									Yes	
19. If funded, will this project increase the operating expense for any other department?									Yes	
Project Cost:	\$650,000	How was the Project Cost Determined:		Hired Consultant						
Budget Impact:	May increase annual operating expenses by more than \$100,000									
Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025		
Planning/Feasibility	\$650,000							\$650,000		
Design/Engineering	\$0									
Land/ROW Acquisition	\$0									
Site Preparation	\$0									
Construction	\$0									
Construction Management	\$0									
Equipment	\$0									
Furniture, Fixtures, and Equipment	\$0									
Technology Hardware/Software	\$0									
Other Expenses	\$0									
TOTAL	\$650,000	\$0	\$0	\$0	\$0	\$0	\$0	\$650,000		
<div style="display: flex; justify-content: space-between;"> \$0 \$650,000 \$0 \$0 \$0 \$0 \$0 \$0 \$650,000 </div>										

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Mitchell School Renovation

Fiscal Year: 2025

Project Description and Considerations

Constructed in 1950, the Mitchell Elementary School has undergone several additions over the past 50 years, but is in need of total renovation/replacement to address building deficiencies and modernize the learning environment. This request would bring the Mitchell facility to a level of modernization comparable to that of the Hillside School, which is in the midst of an ongoing renovation project. The Town of Needham has submitted Statements of Interest to the MSBA to partner with the Town in renovating this school, but has not yet received an invitation to move forward with construction.

This is a project to renovate/replace the Mitchell School and is contingent upon the MSBA agreeing to partner with the Town in completing this project. It is possible that a modified project scope could be considered. Final decisions will be made upon project acceptance and a feasibility study, completed jointly with the MSBA. Project costs are based on a 2014 update of a 2012 Dore & Whittier Pre-feasibility estimate for an 82,227 s.f. 503-student school (Option 1A.3, New Construction), plus \$650,000 for pre-feasibility design.

Preliminary Project Schedule:

Feasibility Study: FY25

Debt Exclusion Override: FY25 (April 2015)

Schematic Design/Design Development/ Project Funding Year: FY26

Mitchell Moves to Swing Space: FY27

Construction: FY27 & FY28

New School Opens: September 2028 (FY29)

Project Budget:

The Total estimated project cost of \$88,526,200 occurs outside of the five-year window and is detailed in the chart below. The total budget excludes the cost of swing space, which is described in a separate capital request, either in the form of renovating the Hillside School for use as swing space, or the cost of constructing a temporary school at DeFazio Park. Project costs are based on a 2012 Dore & Whittier Pre-feasibility estimate of \$39,543,000 for an 82,227 s.f. 503-student school (Option 1A.3, New Construction), plus \$650,000 for pre-feasibility design. The Dore & Whittier costs, developed in 2012, were updated in 2014 and escalated for 14 years to FY27 (the mid-point of construction.) The FY25 cost of \$650,000 represents the cost of feasibility design.

This project reflects a 5% escalation factor, beginning in FY17, based on advice from the PPBC.

The preliminary estimated MSBA reimbursement rate for this project is 32.47%.

Parameters Addressed:

Project Costs Not Included: See Project Budget narrative above.

Permitting: As required by Town Boards.

Technology: The School Instructional Technology Department is in support of this request. The estimated project cost includes a full FF&E budget for this new facility, including classroom technology.

Building Improvements: The PPBC and Public Facilities Department support this request.

FTE: Estimate 2.0 Additional Custodians; 2.0 Additional Crossing Guards, Similar to Hillside.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Mitchell School Renovation

Fiscal Year: 2025

Supplemental Information

**Mitchell School Renovation/ Replacement, Based on 2014 Dore & Whittier PreFeasibility Study
Option 1A.2a, New School Construction for 503 Students, Updated 2014
Scheduled opening: September 2023 (FY24)**

82,227 SF Building		Feasibility	Construction*	A/E	FF&E	Constr Mgnt	Total	Cost/SF
FY14 Project Cost (D&W)		650,000	34,781,640	6,048,928	1,207,200	1,512,232	44,200,000	
TOTAL		650,000	34,781,640	6,048,928	1,207,200	1,512,232	44,200,000	\$538
		1%	79%	14%	3%	3%	100%	
6.00%	FY15 Cost Multiplier @ 6%	650,000	36,868,538	6,411,864	1,279,632	1,602,966	46,813,000	\$569
6.00%	FY16 Cost Multiplier @ 6%	650,000	39,080,651	6,796,576	1,356,410	1,699,144	49,582,780	\$603
5.00%	FY17 Cost Multiplier @ 3.8%	650,000	41,034,683	7,136,404	1,424,230	1,784,101	52,029,419	\$633
5.00%	FY18 Cost Multiplier @ 3.8%	650,000	43,086,417	7,493,224	1,495,442	1,873,306	54,598,390	\$664
5.00%	FY19 Cost Multiplier @ 3.8%	650,000	45,240,738	7,867,886	1,570,214	1,966,971	57,295,809	\$697
5.00%	FY20 Cost Multiplier @ 3.8%	650,000	47,502,775	8,261,280	1,648,725	2,065,320	60,128,100	\$731
5.00%	FY21 Cost Multiplier @ 3.8%	650,000	49,877,914	8,674,344	1,731,161	2,168,586	63,102,005	\$767
5.00%	FY21 Cost Multiplier @ 3.8%	650,000	52,371,810	9,108,061	1,817,719	2,277,015	66,224,605	\$805
5.00%	FY22 Cost Multiplier @ 3.8%	650,000	54,990,400	9,563,464	1,908,605	2,390,866	69,503,335	\$845
5.00%	FY23 Cost Multiplier @ 3.8%	650,000	57,739,920	10,041,637	2,004,035	2,510,409	72,946,002	\$887
5.00%	FY24 Cost Multiplier @ 3.8%	650,000	60,626,916	10,543,719	2,104,237	2,635,930	76,560,802	\$931
5.00%	FY25 Cost Multiplier @ 3.8%	650,000	63,658,262	11,070,905	2,209,449	2,767,726	80,356,342	\$977
5.00%	FY26 Cost Multiplier @ 3.8%	650,000	66,841,175	11,624,451	2,319,921	2,906,113	84,341,660	\$1,026
5.00%	FY27 Cost Multiplier @ 3.8%	650,000	70,183,234	12,205,673	2,435,917	3,051,418	88,526,243	\$1,077
14 Years	TOTAL PROJECT COST	650,000	70,183,234	12,205,673	2,435,917	3,051,418	88,526,243	\$1,077
	TOTAL COST (ROUNDED)	650,000	70,183,200	12,205,700	2,435,900	3,051,400	88,526,200	\$1,077

* Excludes modular temporary classrooms

Square Footage 82,227

Note - costs escalated at rates shown above, to midpoint of construction (FY27). There are 2 construction years, FY27 and FY28. School opens FY29 (Sept 2028). Mitchell moves to swing space FY27. FY25 is feasibility funding year; FY26 is design & full funding year.

	FY25	FY26	FY27	
Feasibility	650,000			650,000
Arch/Engineering		12,205,700		12,205,700
<u>Construction</u>			<u>75,670,500</u>	<u>75,670,500</u>
	650,000	12,205,700	75,670,500	88,526,200

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Newman Preschool Playground Custom Shade Shelter **Fiscal Year:** 2020

Purpose:	Acquisition	Classification:	Equipment	Status:	New Request
Department:	Needham Public Schools			Supports:	Public Education
Partners:				Useful Life:	

Parameters	Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	Yes
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	No
6. If funded, will additional permanent staff be required?	No
Total New FTE's:	
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	Yes
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	Yes
18. Will any other department be required to provide assistance in order to complete the project?	Yes
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	\$49,800	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$0							
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$0							
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$49,800		\$49,800					
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$49,800	\$0	\$49,800	\$0	\$0	\$0	\$0	\$0

\$0

Capital Project Request

Project Title: Newman Preschool Playground Custom Shade Shelter

Fiscal Year:

2020

Project Description and Considerations

The Newman Preschool playground was renovated in FY14. The playground is situated in a part of the school that has constant sunlight. At this time, access to the playground is limited to mild weather given that there is no available shade on the playground and temperatures climb rapidly on sunny days. About half of the children who attend the preschool are identified as having special needs, and many struggle with their social-emotional skills. A custom shade shelter would increase the students' comfort and access to the playground, which in turn would create more meaningful social opportunities for them during their day. It is also worth noting that this impacts the program year round, as the preschool runs a summer program for students who require year- round special education services.

This request is for a custom shade shelter to be built over the center section of the playground. The quoted structure consists of five steel columns and three triangular 'sail style' canopy tops, of the type depicted in the picture below. This structure would provide the shade necessary for students and staff to remain outside during recess periods. The quoted purchase and installation cost is \$43,000 (2017.) The estimated FY20 cost of \$49,800 includes an annual inflation adjustment of 5%. Permitting would be required.



Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Pollard Phased Improvements Feasibility Study **Fiscal Year:** 2019

Purpose:	Construction	Classification:	Building	Status:	Amended Request from the Prior CIP
Department:	Needham Public Schools			Supports:	Public Education
Partners:				Useful Life:	More than twenty-five (25) years

Parameters	Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	Yes
6. If funded, will additional permanent staff be required?	No
Total New FTE's:	
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	Yes
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	\$65,000	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$65,000	\$65,000						
Design/Engineering	\$0							
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$0							
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$65,000	\$65,000	\$0	\$0	\$0	\$0	\$0	\$0

\$0

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Pollard Phased Improvements Feasibility Study

Fiscal Year:

2019

Project Description and Considerations

This is a project to study the feasibility of phasing the Pollard Improvements project over multiple years, for the purpose of best addressing the needs of that facility in the most timely and economically feasible manner possible. Additionally, the study should evaluate the current condition of the Pollard modularity and develop recommendations (as needed) for extending their useful life until such time as they can be replaced with permanent construction.

The Pollard Improvements Project is presented as a separate Capital Improvement Project Request, timed for initial funding in FY 27. This project is based on a 2011 facilities assessment completed by Dore & Whittier Architects, which identified approximately \$17.8 million in needed upgrades to the Pollard School. These were upgrades that could not be undertaken as part of the regular maintenance budget, due to their large scope and/or cost, and included: renovation and enlargement of the science and engineering classrooms, updates to the auditorium and reconfiguration of the administration area. The science classrooms are undersized compared to Massachusetts School Building Authority (MSBA) standards, do not have adequate prep rooms or storage spaces and include casework and plumbing fixtures that are in poor condition. The engineering classroom is a converted space that is not well-suited to delivery of the curriculum. The auditorium needs updating, including sound and lighting upgrades, in order to remain a suitable space for performing arts, guest lectures and assemblies. In addition, the administration space, which is located on the side of the building, is difficult for visitors to locate, doesn't allow school personnel to view visitors as they approach the building and is undersized by MSBA standards. Finally, the modular classrooms, constructed in 2002, are not designed as permanent, long-term facilities. They are constructed of inexpensive materials, in off site production style construction techniques and are not energy efficient. A long-term solution will be required within the next five to ten years. (The expected lifespan for modular classrooms is 20-25 years.)

Given the scope and cost of these upgrades, as well as the need to modernize other school facilities within the next ten year period (Hillside School, Mitchell School, Emery Grover Administration Building), the School Department has requested funding for these improvements beginning in FY27, with an expected completion year in September 2030 (FY31.) The placement of this project so far into the future defers these needed improvements by more than a decade, resulting in significantly increased cost and a lengthy period of unmet need.

The purpose of the feasibility study is to determine whether or not it would be possible to phase the project over multiple years with the goal of accelerating completion of the project and reducing the overall project cost. A particular emphasis is the Pollard modular classrooms, which are nearing the end of their useful life, but which are needed to meet the current program of studies for the projected enrollment. The study should also look at the cost benefit of completing the science classrooms first to create swing space when the modular classrooms are demolished, examine strategies to maximize potential MSBA reimbursement for this project and, finally, estimate future need, based on long-term enrollment trends. In addition, some ongoing maintenance repair work may have reduced the scope of the overall project, such as the relocation of the administrative offices at Pollard, renovations to bathrooms and auditorium seating improvements.

This request is amended from last year to reflect a FY2019 funding year, since it was not funded in FY18.

Parameters Addressed:

Other Departmental Assistance: PPBC Project Management

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request									
Project Title: Pollard School Renovation					Fiscal Year: 2027				
Purpose:	Construction	Classification:	Building	Status:	Same Request from the Prior CIP				
Department:	Needham Public Schools			Supports:	Public Education				
Partners:	Massachusetts School Building Authority			Useful Life:	More than twenty-five (25) years				
Parameters								Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?								Yes	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?								No	
3. Does this project require any permitting by any Town or State agency?								Yes	
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?								Yes	
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?								No	
6. If funded, will additional permanent staff be required?						Total New FTE's:		No	
7. If funded, will the operating budget need to be increased to cover operating expenses?								Yes	
8. If funded, will this project lower the requesting Department's operating costs?								No	
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?								No	
10. If the project is NOT funded, will current Town revenue be reduced?								No	
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?								No	
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?								No	
13. Is this a request in response to a Court, Federal, or State order?								No	
14. Is this a request in response to a documented public health or safety condition?								No	
15. Is this a request to improve or make repairs to extend the useful life of a building?								Yes	
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?								No	
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?								No	
18. Will any other department be required to provide assistance in order to complete the project?								Yes	
19. If funded, will this project increase the operating expense for any other department?								Yes	
Project Cost:	\$0	How was the Project Cost Determined:			Hired Consultant				
Budget Impact:	May increase annual operating expenses by more than \$100,000								
Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025	
Planning/Feasibility	\$0								
Design/Engineering	\$0								
Land/ROW Acquisition	\$0								
Site Preparation	\$0								
Construction	\$0								
Construction Management	\$0								
Equipment	\$0								
Furniture, Fixtures, and Equipment	\$0								
Technology Hardware/Software	\$0								
Other Expenses	\$0								
TOTAL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
\$0									

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Pollard School Renovation

Fiscal Year:

2027

Project Description and Considerations

In 2011, a facilities assessment was conducted of the Mitchell, Hillside and Pollard Schools. This assessment identified repair projects that should be undertaken to extend the useful life of these school buildings. It also identified, in summary fashion, the need for programmatic improvements at the Pollard Middle School, for the purpose of adapting Pollard to the “21st Century Learning” environment. This environment reflects changes in education that have occurred over the past 50 years, including technology integration, project-based learning, team-teaching, multi-disciplinary collaboration and special education delivery methods. Dore & Whittier, the architects who conducted the facilities assessment, concluded that a detailed programmatic study be undertaken, in order to understand the full scope of the programmatic improvements needed and to ensure that any future renovation/improvement project be comprehensive enough to meet both the facility maintenance and programmatic needs of the school for the next several decades.

Many of the improvements identified in the facilities assessment have been, or will be, completed through the regular maintenance program. These include: bathroom renovation; interior door replacement; installation of LED exist signs; roof repair; installation of new gas main on Harris Ave.; replacement of the telephone, PA and clock systems; replacement of the paved walkway from the parking lot to the building; water fountain replacement; demolition of the condemned bridge; auditorium seating replacement; gym flooring replacement; removal of remaining VCT and VAT flooring in the 1958 wing; water heater replacement; removal and abatement of the fuel oil tank; boiler replacement; classroom lighting replacement; asbestos abatement.

Other identified improvements, however, will not be undertaken as part of the regular maintenance budget. These include: renovation and enlargement of the science and engineering classrooms, updates to the auditorium and reconfiguration of the administration area. The science classrooms are undersized from Massachusetts School Building Authority (MSBA) standards, do not have adequate prep rooms or storage spaces and include casework and plumbing fixtures that are in poor condition. The engineering classroom is a converted space that is not well-suited to delivery of the curriculum. The auditorium needs updating, including sound and lighting upgrades, in order to remain a suitable space for performing arts, guest lectures and assemblies. In addition, the administration space, which is located on the side of the building, is difficult for visitors to locate, doesn't allow school personnel to view visitors as they approach the building and is undersized by MSBA standards. Finally, the modular classrooms, constructed in 2002, are not designed as permanent, long-term facilities. They are constructed of inexpensive materials, in fast-production style construction techniques and are not energy efficient. A long-term solution will be required within the next fifteen years. (The expected lifespan for modular classrooms is 20-25 years.)

This request is for funds to repair/renovate the Pollard Middle School to address identified deficiencies and meet programmatic needs. The projected cost was developed by Needham Public Schools, based on improvements identified in the Condition Assessment, which Public Facilities does NOT expect to undertake from its regular maintenance budget. These projects include the following: Replace Doors (#1.03 \$113,880), Renovate Exit Corridors Near Band Room (#1.17 \$131,400), Remove Borrowed Lights in 1958 Building (#2.02, \$47,085), Sprinkler Remaining Building (#2.03, \$1,620,600), New Science Classroom Addition Option 3 (#3.01.3, \$6,745,200), Relocate Administration & Convert Existing Administration to Classroom (#3.02, \$1,423,500), Renovate Multi-Stall Toilet Rooms Near Auditorium (#3.03, \$952,650), Renovate Auditorium (HVAC, Light, Flooring, Seating) (#3.08, \$2,392,575), Replace Existing Signage (#4.05, \$4,380), Upgrade Elevator Controls (#4.07, \$43,800), Accessibility Improvements to Choral Room & Lecture Hall (#4.08, \$19,710), Sell or Demolish Modular Classrooms (#5.1, \$9,855), Replace Water Distribution Piping (#5.15, \$416,100), Replace Classroom Sinks (#5.17, \$76,650), Remove Pneumatic Control System & Replace with Electronic (#5.19, \$697,515), Replace Classroom Unit Ventilators & Repairs to Roof (#5.21, \$660,285), In Core & Assembly Areas & Replace with VAV Heat/Cool RTUs (#5.22, \$1,018,350), Electrical Service Upgrade (#5.24, \$996,450), Replace Fire Alarm Control Panels (#5.25, \$48,180), Replace PA System Head End (#5.26, \$52,000), New Site Drainage Structures & Pipe (#5.28, \$181,770), and Provide New Server & Water Line Connections (#5.29, \$153,300.) The cost of item #3.01.3 is based on “Science Option 3,” which constructs a 14,500 s.f. science wing addition to the school. A Statement of Interest will be filed with the MSBA to initiate a dialog about this facility. It is possible that a modified project scope could be considered. Final decisions will be made upon project acceptance and a feasibility study, completed jointly with the MSBA.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Pollard School Renovation

Fiscal Year: 2027

Preliminary Project Schedule:

Feasibility Study: FY27
Schematic Design/Project Funding Year: FY28
Pollard Moves to Swing Space: FY29
Construction: FY29-30
Renovated School Opens: September 2030 (FY31)

Preliminary Budget:

Project costs based on Dore & Whittier Facilities Assessment, 2014. The total project budget is \$72,004,100 and is broken out in the chart below. Costs escalated at 6%/year (FY15 & FY16), and 5%/year, thereafter. The preliminary MSBA reimbursement rate for this project is 32.47%. This project is revised from prior years to use a 5% escalation factor in fiscal years beginning FY17, as directed by the PPBC.

Parameters Addressed:

Project Costs Not Included: See Project Budget narrative above.
Permitting: As required by Town Boards.
Building Improvements: The PPBC and Public Facilities Department support this request.
Operating Budget Increase: Improvements to HVAC, electrical system may increase building maintenance expense by more than \$100,000/year. This placeholder estimate to be revised

**Pollard Improvements
Dore & Whittier, Comprehensive Facilities Assessment, 2014**

<i>From Condition Assessment - Pollard Long-Term Improvements</i>	Construction
1.03 Replace Corridor/Doors w Fire Rated Doors	113,880
1.17 Renovate Exit Corridors Near Band Room	131,400
2.02 Remove Borrowed Lites in 1958 Building	47,085
2.03 Sprinkler Remaining Building	1,620,600
3.01.3 New Science Classroom Addition (Option 3)	6,745,200
3.02 Relocate Admin, Convert Existing Admin to Classrooms	1,423,500
3.03 Multi-Stall Toilet Rooms Near Auditorium	952,650
3.08 Renovate Auditorium AHVAC, Lighting, Flooring, Seating	2,392,575
4.05 Replace Existing Signage	4,380
4.07 Upgrade Elevator Controls	43,800
4.08 Accessibility Improvements to Choral Room & Lecture Hall	19,710
5.1 Sell or Demolish Modular Classrooms; Regrade Area	9,855
5.15 Replace Water Distribution Piping	416,100
5.17 Replace Classrom Sinks	76,650
5.19 Remove Pneumatic Control System & Replace with Electronic	697,515
5.21 Replace Classroom Unit Ventilators, Repairs to Roof	660,285
5.22 In Core & Assembly Areas, Replace with VAV Heat/Cool RTUs	1,018,350
5.24 Electrical Service Upgrade	996,450
5.25 Replace Fire Alarm Control Panels	48,180
5.26 Replace PA System Head End	52,000
5.28 New Site Drainage Structures & Pipe	181,770
5.29 Provide New Server & Water Line Connections	153,300
Subtotal Condition Assessment Cost	17,805,235

Assume
Feasibility - 1 year
Design - 1 year
Construction - 2 Years

Assume
Feasibility Funding Year - FY27
Project Funding Year - FY28
Midpt of Constr - FY29 (15 Years Escalation)

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request					
Project Title:	Pollard School Renovation			Fiscal Year:	2027
	General Conditions Allowance	1,780,524	10% of construction	6.00%	FY15 & FY16
	Escalation to Mid Point of Construction	21,910,889	15 Yrs to 2029	5.00%	Afterward
	Subtotal A Construction	41,496,648			
	Bonds	414,966	1% of Subtotal A		
	Insurance	414,966	1% of Subtotal A		
	Subtotal B Construction	42,326,581			
	Fee	534,157	3% of Condition Assessment Cost		
	Design & Pricing	6,348,987	15% of Subtotal B		
	Total Construction Cost	49,209,725			
	Project Contingency - Construction	7,381,459	15% of Total Construction		
	Project Contingency - Owner	2,460,486	5% of Total Construction		
	Subtotal Contingency	9,841,945			
	Soft Cost (OPM, A/E, Survey, etc)	12,302,431	25% of Total Construction		
	FF&E	-			
	Total	71,354,101			
	<u>Summary</u>				
	Construction Cost	49,209,725			
	Project Contingency	9,841,945			
	Soft Cost	12,302,431			
	FF&E	-			
	Total	71,354,101	(Excluding Feasibility)		
		<u>Total</u>	<u>Rounded Total</u>		
	Feasibility	650,000			650,000
	Schematic Design	9,841,945			9,841,900
	Construction	56,591,184			56,591,200
	Owners Project Contingency (Other)	2,460,486			2,460,500
	Construction Management	2,460,486			2,460,500
	Total	72,004,101			72,004,100

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Renovate/Reconstruct Emery Grover Building at Highland Avenue Location		Fiscal Year: 2020	
Purpose:	Construction	Classification:	Building
Department:	Needham Public Schools	Status:	Amended Request from the Prior CIP
Partners:	Community Preservation	Supports:	Public Education
		Useful Life:	More than twenty-five (25) years

Parameters	Response		
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	Yes		
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No		
3. Does this project require any permitting by any Town or State agency?	Yes		
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	Yes		
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	Yes		
6. If funded, will additional permanent staff be required?	Yes		
7. If funded, will the operating budget need to be increased to cover operating expenses?	Yes		
8. If funded, will this project lower the requesting Department's operating costs?	No		
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No		
10. If the project is NOT funded, will current Town revenue be reduced?	No		
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No		
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	Yes		
13. Is this a request in response to a Court, Federal, or State order?	No		
14. Is this a request in response to a documented public health or safety condition?	No		
15. Is this a request to improve or make repairs to extend the useful life of a building?	Yes		
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No		
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No		
18. Will any other department be required to provide assistance in order to complete the project?	Yes		
19. If funded, will this project increase the operating expense for any other department?	Yes		
Project Cost:	\$14,694,500	How was the Project Cost Determined:	Hired Consultant
Budget Impact:	May increase annual operating expenses by more than \$100,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$1,494,100		\$1,494,100					
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$11,156,600			\$11,156,600				
Construction Management	\$111,100		\$111,100					
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$611,800			\$611,800				
Technology Hardware/Software	\$0							
Other Expenses	\$1,320,900			\$1,320,900				
TOTAL	\$14,694,500	\$0	\$1,605,200	\$13,089,300	\$0	\$0	\$0	\$0

\$0

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Renovate/Reconstruct Emery Grover Building at Highland Avenue Location

Fiscal Year:

2020

Project Description and Considerations

The 2005 Facilities Master Plan indicated that the Emery Grover School Administration Building is in need of additional office and storage space, as well as extensive repair and modernization. The needed scope of renovation includes reorganizing office and meeting spaces, making the building fully ADA accessible, removing remaining asbestos and lead paint, and replacing deteriorating systems, including: windows, HVAC, electrical and plumbing. These renovations would allow for a more efficient use of space, as well as full utilization of all four floors and full handicapped accessibility.

A feasibility study was conducted in August 2013 by DesignLAB Architects, which identified several options for the building, including: renovation of the existing building, the purchase/renovation of commercial property, and new construction on an alternate Town-owned parcel. This request is for the renovation of the existing Emery Grover building at its present location. Based on a preliminary budget developed by DesignLAB, the \$9.7 million total cost (2013 \$) could be reduced by Community Preservation Act funding of approximately 67% of construction and related soft costs. The budget includes funds to temporarily re-locate staff to swing space during construction.

Preliminary Project Schedule:

Feasibility Study: FY14 (\$30,000)

Feasibility Study Refresh: FY19 (see separate request)

Design: FY20 (May '19 ATM)

Project Funding Year: FY21 (May '20 ATM)

Emery Grover Occupies Swing Space: FY21-FY22 (July '20 - Sept '22)

Construction: FY21-FY22

New Building Opens: 9/2022 (FY23)

Project Budget:

The above referenced project budget excludes \$30,000 approved at May 2013 Annual Town Meeting for feasibility design, as well as a \$50,000 request in FY19 to 'refresh' the results of the feasibility study conducted in FY14 for the purpose of updating the cost estimates, examining temporary relocation requirements and identifying possible changes to the building code to accommodate the intended use. The feasibility 'refresh', which is presented as a separate capital request, could be funded from CPA funds. The "Other Expenses" category includes \$1,267,740 to occupy leased swing space for one year, while the building is being renovated, including moving expense, plus \$53,200 in legal expense. If, alternatively, the modernized Hillside School is used as swing space, the project budget could be reduced by the lease expense. (The project to modernize Hillside for use as swing space is presented separately.) All costs include 8 years of escalation to the mid-point of construction, using 6%/year (FY14-FY16) and 5.0%/year thereafter.

This project reflects a 5% cost escalator for fiscal years starting FY17, based on advice from the PPBC. It is likely that the final design budget will need to include 2% construction management expense (compared to 1%), but that adjustment is not reflected above, in order to preserve the integrity of the source information.

Parameters Addressed:

Project Costs Not Included: See Project Budget narrative above.

Permitting: As required by Town Boards.

Technology: The School Instructional Technology Department is in support of this request. The estimated project cost includes a full FF&E budget for this new facility, including technology.

Building Improvements: The PPBC and Public Facilities Department support this request.

FTE: Estimate 1.0 Additional Custodian; 1.0 Additional Building Maintenance.

Operating Budget Increase: Improvements to HVAC, electrical system may increase building maintenance expense by more than \$100,000/year. This placeholder estimate to be revised

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Renovate/Reconstruct Emery Grover Building at Highland Avenue Location

Fiscal Year: 2020

Supplemental Information

Emery Grover Renovation Cost Estimated, Based on 2013 DesignLab Study

21,235 SF Building		Feasibility	Construction	A/E	Constr Mgmt	Temporary	FF&E	Other	Total	Cost/SF	Less CPA	Net Cost
FY13 Project Cost (DesignLab)		-	7,339,550	982,906	73,120	834,000	402,500	35,000	9,667,076		8,350,000	1,317,076
TOTAL		-	7,339,550	982,906	73,120	834,000	402,500	35,000	9,667,076	\$455	8,350,000	1,317,076
		0%	76%	10%	1%	9%	4%	0%	100%			
6.00%	FY14 Cost Multiplier @ 6%	-	7,779,923	1,041,880	77,507	884,040	426,650	37,100	10,247,101	\$483	8,350,000	1,897,101
6.00%	FY15 Cost Multiplier @ 6%	-	8,246,718	1,104,393	82,158	937,082	452,249	39,326	10,861,927	\$512	8,350,000	2,511,927
6.00%	FY16 Cost Multiplier @ 6%	-	8,741,521	1,170,657	87,087	993,307	479,384	41,686	11,513,642	\$542	8,350,000	3,163,642
5.00%	FY17 Cost Multiplier @ 5%	-	9,178,598	1,229,190	91,441	1,042,973	503,353	43,770	12,089,324	\$569	8,350,000	3,739,324
5.00%	FY18 Cost Multiplier @ 5%	-	9,637,527	1,290,649	96,014	1,095,121	528,521	45,958	12,693,791	\$598	8,350,000	4,343,791
5.00%	FY19 Cost Multiplier @ 5%	-	10,119,404	1,355,182	100,814	1,149,877	554,947	48,256	13,328,480	\$628	8,350,000	4,978,480
5.00%	FY20 Cost Multiplier @ 5%	-	10,625,374	1,422,941	105,855	1,207,371	582,694	50,669	13,994,904	\$659	8,350,000	5,644,904
5.00%	FY21 Cost Multiplier @ 5%	-	11,156,643	1,494,088	111,148	1,267,740	611,829	53,203	14,694,649	\$692	8,350,000	6,344,649
8	TOTAL PROJECT COST	-	11,156,643	1,494,088	111,148	1,267,740	611,829	53,203	14,694,649	\$692	8,350,000	6,344,649
	TOTAL COST (ROUNDED)	-	11,156,600	1,494,100	111,100	1,267,700	611,800	53,200	14,694,500	\$692	8,350,000	6,344,500

Square Footage 21,235

Note - costs escalated at rates shown above, to midpoint of construction (FY21). There are 2 construction years, FY21 and FY22. EG opens FY23 (July 2022). FY14 & FY19 are feasibility funding years; FY20 is SD/DD. CPA Funding is assumed at 67%.

Project Funding Schedule	FY14	FY20	FY21	FY14-21 Total
Pre-Design	30,000			-
Engineering & Design		1,494,100		1,494,100
Construction	0	111,100	13,089,300	13,200,400
Total	30,000	1,605,200	13,089,300	14,694,500
			Plus FY14 Design:	30,000
				14,724,500

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: School Copiers		Fiscal Year: 2019	
Purpose:	Acquisition	Classification:	Equipment
Department:	Needham Public Schools	Status:	Amended Request from the Prior CIP
Partners:	None	Supports:	Public Education
		Useful Life:	More than five (5) years

Parameters	Response		
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No		
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No		
3. Does this project require any permitting by any Town or State agency?	No		
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No		
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	No		
6. If funded, will additional permanent staff be required?	No		
Total New FTE's:	No		
7. If funded, will the operating budget need to be increased to cover operating expenses?	No		
8. If funded, will this project lower the requesting Department's operating costs?	No		
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No		
10. If the project is NOT funded, will current Town revenue be reduced?	No		
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No		
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No		
13. Is this a request in response to a Court, Federal, or State order?	No		
14. Is this a request in response to a documented public health or safety condition?	No		
15. Is this a request to improve or make repairs to extend the useful life of a building?	No		
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No		
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No		
18. Will any other department be required to provide assistance in order to complete the project?	No		
19. If funded, will this project increase the operating expense for any other department?	No		
Project Cost:	\$359,850	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$0							
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$0							
Construction Management	\$0							
Equipment	\$359,850	\$84,190	\$52,470	\$84,690	\$86,360	\$52,140		
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$359,850	\$84,190	\$52,470	\$84,690	\$86,360	\$52,140	\$0	\$0

\$0

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: School Copiers

Fiscal Year: 2019

Project Description and Considerations

In May of 2003, Town Meeting authorized \$60,000 in first year funding to establish a replacement cycle for school photocopiers. School photocopiers are located in all the schools and the administration building, and are used both by administrative and teaching staff. Teachers use the machines to reproduce classroom materials, including homework sheets, exams, teaching packets etc. Currently the School Department owns 47 copy machines. The FY19-FY23 request replaces the following numbers of copy machines.

Fiscal Year	#of Copy Machines Replaced
FY18 (Requested)	5
FY19 (Requested)	6
FY20 (Requested)	2
FY21 (Requested)	6
FY22 (Requested)	8
FY23 (Requested)	4

Copier replacement is planned on a cycle analysis, which projects when a copier should be replaced based on actual usage and the manufacturer's total estimated capacity. Copiers which are heavily used, are replaced more frequently than copiers that are lightly used. A seven-year maximum is assumed for most machines, 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 assumes that copiers are re-deployed around the District as needed, to match copier use with equipment capacity.

This request is revised from the prior CIP to reflect updated life cycle calculations (based on copier usage and current condition), which have shifted replacement priorities in some cases.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: **School Copiers**

Fiscal Year: **2019**

Supplemental Information

Building	Location	Make	Model	Purchase Year	% of Useful Life					Replacement Cost					Age at Repl'm't
					FY19	FY20	FY21	FY22	FY23	FY19	FY20	FY21	FY22	FY23	
Administration	SECOND FLOOR	XEROX	5755APT	12/11/12	82%	12%	25%	37%	50%	\$10,330	-	-	-	-	7
Administration	Production Center	Konica	KM1025	9/1/15	103%	130%	27%	54%	82%	-	\$38,590	-	-	-	5
Administration	FIRST FLOOR	Konica	KM 754 e	2/26/14	13%	16%	18%	20%	2%	-	-	-	\$7,090	-	8
Administration	Production Center	XEROX refur	D125	12/11/12	94%	9%	18%	26%	35%	\$36,750	-	-	-	-	7
Broadmeadow	Teacher Lounge	Konica	KM 654 E	2/26/14	51%	59%	68%	8%	17%	-	-	\$14,570	-	-	9
Broadmeadow	Teachers Room	Konica	KM 654 E	10/15/14	18%	21%	25%	29%	4%	-	-	-	\$7,090	-	8
High School	Main Office	Konica	KM 364E	8/15/15	100%	106%	112%	6%	12%	-	-	\$6,750	-	-	6
Broadmeadow	ETC	XEROX	3550	4/1/12	30%	34%	39%	4%	9%	-	-	\$2,250	-	-	9
High School	Media	XEROX	3550	4/1/12	12%	14%	15%	16%	18%	-	-	-	-	-	
High School	Athletics	Konica	KM 454E	8/23/16	31%	47%	62%	78%	94%	-	-	-	-	\$7,440	7
High School	Math/Sci Rm 205	XEROX	5775PT	11/15/11	4%	9%	13%	17%	21%	-	-	-	-	-	
High School	World Lang 704	Konica	KM 654 e	2/26/14	44%	53%	61%	70%	27%	-	-	\$15,300	-	8	
High School	Health Office 607	XEROX	WC3550 X	12/11/12	8%	9%	10%	11%	12%	-	-	-	-	-	
High School	Bookkeeper's Office	XEROX	WC3550 X	12/11/12	51%	57%	63%	69%	76%	-	-	-	-	-	
High School	Music	Konica	KM 654 E	8/23/16	6%	9%	12%	14%	17%	-	-	-	-	-	
High School	PE	XEROX	WC3550 X	12/11/12	48%	50%	51%	53%	55%	-	-	-	-	-	
High School	College 503	Konica	KM 364 e	2/26/14	44%	52%	59%	67%	8%	-	-	\$2,360	-	8	
High School	Media Center	Konica	KM 454 e	2/26/14	19%	20%	22%	23%	25%	-	-	-	-	-	
High School	SPED Rm 801	XEROX	5740APT	12/11/12	113%	17%	34%	51%	68%	\$10,330	-	-	-	-	7
High School	SS/English 703	Konica	KM 754 e	2/25/14	35%	39%	43%	47%	50%	-	-	-	\$16,070	9	
High School	Eng/SS	Konica	KM 754 e	9/1/15	45%	57%	68%	80%	11%	-	-	\$15,300	-	7	
High School	Grade Level	XEROX	WC5740APT	12/11/12	34%	36%	37%	39%	41%	-	-	-	-	-	
High School	Math/Sci	Konica	KM 754 e	9/1/15	51%	64%	77%	91%	104%	-	-	-	\$16,070	8	
Hillside	Main Office	XEROX	5755APT	12/11/12	36%	45%	46%	55%	65%	-	-	-	-	-	
Hillside	Downstairs	XEROX	5765PT	11/15/11	41%	18%	22%	27%	31%	-	-	-	-	-	
Hillside	Main Office	Konica	KM 754E	2/25/14	71%	94%	118%	141%	165%	-	-	-	-	-	
Mitchell	Back Door	Ricoh	MP8001	2008	1%	2%	3%	5%	6%	-	-	-	-	-	
Mitchell	5th grade wing	XEROX	5765PT	11/15/11	33%	35%	37%	39%	41%	-	-	-	-	-	
Mitchell	Front Office	Konica	KM654E	10/15/14	52%	62%	73%	83%	10%	-	-	\$11,960	-	8	
Newman	Front Office	XEROX	5775PT	12/11/12	69%	81%	12%	23%	35%	-	\$13,880	-	-	-	7

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request																
Project Title:		School Copiers										Fiscal Year:				2019
Newman	Hall Outside Office	Konica	KM 654 E	8/23/16	15%	23%	30%	38%	45%	-	-	-	-	-	-	
Newman	Hallway near caf	XEROX	5765PT	11/15/11	2%	4%	6%	8%	10%	-	-	-	-	-	-	
Newman	Down Stairs Hall	XEROX	5755APT	12/11/12	79%	11%	21%	32%	42%	\$10,330	-	-	-	-	7	
Newman	Main Office	XEROX	3550X	12/11/12	22%	25%	28%	3%	7%	-	-	\$2,360	-	-	9	
Pollard	8th Grade Hallway	konica	KM 654 e	9/1/15	26%	33%	41%	48%	55%	-	-	-	-	\$12,560	8	
Pollard	teacher's Lounge	XEROX	5765PT	11/15/11	2%	4%	6%	8%	10%	-	-	-	-	-	-	
Pollard	Main Office	Konica	KM 754E	2/25/14	58%	67%	76%	9%	18%	-	-	\$15,300	\$0	-	7	
Pollard	7th Grade work area	Konica	KM654E	10/15/14	40%	47%	55%	62%	7%	-	-	-	\$11,960	-	8	
Pollard	modulars	XEROX	5740APT	12/11/12	2%	3%	5%	6%	8%	-	-	-	-	-	-	
Pollard	Media Com -OP	XEROX	3550	4/1/12	14%	16%	18%	20%	22%	-	-	-	-	-	-	
High Rock	Room 207	Konica	KM 654E	8/23/16	11%	17%	22%	28%	33%	-	-	-	-	-	-	
High Rock	Main Office	Konica	KM 754E	10/15/14	33%	39%	45%	51%	6%	-	-	\$15,300	-	-	8	
Eliot Elementary	Main Office	Konica	KM754 E	2/25/14	24%	28%	32%	36%	40%	-	-	-	-	-	-	
Eliot Elementary	Room 151	Xerox	5765PT	11/15/11	44%	6%	12%	18%	24%	\$10,330	-	-	-	-	8	
Eliot Elementary	Room 210	Xerox	5135PT	11/15/11	114%	18%	37%	55%	74%	\$6,120	-	-	-	-	8	
Kase Cong Church	Main Office	Canon	R2230	8/1/05	33%	35%	36%	37%	38%	-	-	-	-	-	-	
Administration	Color Copier Product	Xerox	Color 560	2/25/14	57%	67%	77%	10%	20%	-	-	\$43,460	-	-	7	
Totals										\$84,190	\$52,470	\$84,690	\$86,360	\$52,140		

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: School Department Technology Request **Fiscal Year:** 2019

Purpose:	Acquisition	Classification:	Technology	Status:	Amended Request from the Prior CIP
Department:	Needham Public Schools			Supports:	Public Education
Partners:				Useful Life:	More than five (5) years

Parameters	Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	Yes
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	No
6. If funded, will additional permanent staff be required?	No
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	\$2,354,225	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$0							
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$0							
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$2,354,225	\$303,600	\$566,100	\$556,325	\$500,200	\$428,000		
Other Expenses	\$0							
TOTAL	\$2,354,225	\$303,600	\$566,100	\$556,325	\$500,200	\$428,000	\$0	\$0

\$0

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: School Department Technology Request

Fiscal Year:

2019

Project Description and Considerations

The FY19-23 CIP request funds the purchase of School Department technology, including computers, printers, interactive white boards (IWBs), specialized instructional labs, projectors, video displays, and security cameras. The request also includes funding for school technology infrastructure, including servers, network hardware, wireless infrastructure data cabling and access points. This request reflects the decision in FY17 to move Digital Learning Devices (DLDs) and staff laptops to the operating budget, as well the new classroom technology standard. A chart summarizing the five-year request is included on the next page.

The FY19-23 Capital Improvement Plan (CIP) for school technology totals \$2,354,225 and includes \$1,789,225 for school hardware replacement and \$565,000 for school technology infrastructure. The hardware request represents the replacement of school technology with a life cycle of five years or more. (In FY17, funding for devices with a lifespan of less than five years was shifted to the Operating Budget. These devices included Digital Learning Devices (DLDs) such as iPads and Chromebooks, and laptops.)

The \$1,789,225 hardware component includes the following: \$849,200 for specialized lab replacement (including \$92,000 to replace the NHS Graphic Arts Lab equipment); \$510,000 for interactive whiteboard replacement (including \$90,000 for IWBs in the Kindergarten classrooms, starting FY20); \$298,500 for desktop computer replacement; \$87,525 for printer replacement; \$24,000 for video displays; and \$20,000 to replace the NHS security camera system in FY22. Desktop computers have an assumed life of five years, the replacement cycle for which now includes administrative support staff desktops, specialized special education classroom desktops, science center support staff desktops, and specialized preschool student computers. Whiteboards are replaced after six years, although the industry-recommended replacement cycle is five years. (Past experience indicates that this is a reasonable assumption and will require approximately 30 IWB/year on average. The average cost of replacing an IWB is \$5,000. Newer technology associated with the replacement IWBs may necessitate additional electrical outlets that would have to be installed by the Town's electrician. Any additional costs to the town are not budgeted in this request.) Specialized labs are replaced as needed, based on the age and condition of the equipment contained therein. The five-year plan includes the following labs: computer labs at Pollard in FY19-FY23 (@\$8,100/year in FY19 & 20, and \$40,500 per year in FY22 and FY23), computer lab replacement at Mitchell and Newman in FY21 (\$81,000, or \$40,500/lab), and computer lab replacement at Broadmeadow, Eliot, Hillside and High Rock in FY23 (\$162,000, or \$40,500/lab.) At NHS, six science labs will be replaced in FY20 (\$54,000, or \$9,000/lab), a computer lab and two writing labs will be replaced in FY21 (\$121,500, or \$40,500/lab), two art labs/classrooms and a music lab will be replaced in FY22 (\$121,500, or \$40,500/lab), the graphic arts labs will be updated in FY19-20 at 46,000 per year (or \$92,000), and the NHS TV Studio will be replaced in FY19-22 at a total cost of \$120,000. The remaining science labs at NHS will not need to be replaced, given the proliferation of 1:1 technology at NHS.

An additional \$565,000 will be allocated to infrastructure upgrades, including servers, network hardware, wireless access points and cabling.

This five year capital request is largely unchanged from the prior year submission, except for the addition of the FY23 request and a \$52,700 increase in the cost of lab replacement at Pollard and NHS. There are no changes to the infrastructure request in FY19-22. A summary of changes from the prior year is presented on the next page.

The FY19 request is for \$303,600 and represents a \$11,600 increase over the FY19 projection included in the FY18-22 CIP. The \$303,600 request increase consists of \$190,600 in hardware replacement and \$113,000 in infrastructure improvements. The hardware replacement budget of \$227,000 increases \$11,600 from the prior year and reflects the additional cost of computer lab replacement at Pollard and NHS.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: School Department Technology Request

Fiscal Year:

2019

Supplemental Information

Summary	FY19	FY19	FY19	FY20	FY20	FY20	FY21	FY21	FY21	FY22	FY22	FY22	FY23	FY19-23
Hardware	Prior	New	Change	Prior	New	Change	Prior	New	Change	Prior	New	Change	New	Total
Classroom Digital Learning Devices	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shared Cart Digital Learning Devices	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Laptops	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Admin iPads	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Teacher iPads	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Student iPads	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Laptop Cart	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lab	40,500	54,100	13,600	40,500	54,100	13,600	202,500	202,500	-	121,500	162,000	40,500	202,500	675,200
Science Lab	-	-	-	54,000	54,000	-	-	-	-	-	-	-	-	54,000
Desktop Computers	22,500	22,500	-	123,000	123,000	-	108,000	108,000	-	22,500	22,500	-	22,500	298,500
Security Camera System	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Graphics Art Labs	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TV Studio	30,000	30,000	-	30,000	30,000	-	30,000	30,000	-	30,000	30,000	-	-	120,000
Printers	-	-	-	22,000	22,000	-	22,825	22,825	-	42,700	42,700	-	-	87,525
IWB - Gr 1-12	80,000	60,000	(20,000)	80,000	80,000	-	80,000	80,000	-	110,000	110,000	-	90,000	420,000
IWB - Kindergarten	-	-	-	90,000	90,000	-	-	-	-	-	-	-	-	90,000
Projectors	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Video Displays (Gym, Café)	6,000	24,000	18,000	13,000	-	(13,000)	-	-	-	-	-	-	-	24,000
Security Cameras	-	-	-	-	-	-	-	-	-	20,000	20,000	-	-	20,000
Subtotal	179,000	190,600	11,600	452,500	453,100	600	443,325	443,325	-	346,700	387,200	40,500	315,000	1,789,225
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Summary	FY19	FY19	FY19	FY20	FY20	FY20	FY21	FY21	FY21	FY22	FY22	FY22	FY23	FY19-23
Infrastructure	Prior	New	Change	Prior	New	Change	Prior	New	Change	Prior	New	Change	New	Total
Servers	30,000	30,000	-	30,000	30,000	-	30,000	30,000	-	30,000	30,000	-	30,000	150,000
Network Hardware	20,000	20,000	-	20,000	20,000	-	20,000	20,000	-	20,000	20,000	-	20,000	100,000
Wireless Infra. Data Cabling	5,000	5,000	-	5,000	5,000	-	5,000	5,000	-	5,000	5,000	-	5,000	25,000
Wireless Infra. Access Points	58,000	58,000	-	58,000	58,000	-	58,000	58,000	-	58,000	58,000	-	58,000	290,000
Subtotal	113,000	113,000	-	113,000	113,000	-	113,000	113,000	-	113,000	113,000	-	113,000	565,000
Summary	FY19	FY19	FY19	FY20	FY20	FY20	FY21	FY21	FY21	FY22	FY22	FY22	FY23	FY19-23
Grand Total	Prior	New	Change	Prior	New	Change	Prior	New	Change	Prior	New	Change	New	Total
Hardware	179,000	190,600	11,600	452,500	453,100	600	443,325	443,325	-	346,700	387,200	40,500	315,000	1,789,225
Infrastructure	113,000	113,000	-	113,000	113,000	-	113,000	113,000	-	113,000	113,000	-	113,000	565,000
Grand Total	292,000	303,600	11,600	565,500	566,100	600	556,325	556,325	-	459,700	500,200	40,500	428,000	2,354,225

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: School Document Management System **Fiscal Year:** 2020

Purpose:	Construction	Classification:	Building	Status:	Amended Request from the Prior CIP
Department:	Needham Public Schools			Supports:	Public Education
Partners:				Useful Life:	More than five (5) years

Parameters **Response**

1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	Yes
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	No
6. If funded, will additional permanent staff be required?	Total New FTE's: No
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	\$176,900	How was the Project Cost Determined:	In-House Estimate
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$0							
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$0							
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$0							
Technology Hardware/Software	\$36,100		\$36,100					
Other Expenses	\$140,800		\$140,800					
TOTAL	\$176,900	\$0	\$176,900	\$0	\$0	\$0	\$0	\$0

\$0

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: School Document Management System

Fiscal Year:

2020

Project Description and Considerations

This is a request to purchase and implement a document management system for the efficient storage and retrieval of school documents, including student files, financial and administrative information. The acquisition cost also includes the cost to convert existing paper-based records to electronic format.

The document management system provides electronic storage and retrieval, automated document indexing and networked access for group workflow and email capability. The acquisition cost is based on a 2015 purchase estimate of \$32,000 and \$125,000 cost of document conversion, escalated at a cost of 3%/year. The document conversion cost is based on approximately 856 cubic feet of documents (Human Resources, Special Education) and is phased over two years.

Project timing based on planned renovation/reconstruction of Emery Grover School Administration Building in FY21-22, and is timed to precede the relocation of staff to swing space in FY21 during construction. The project is revised to accelerate the timing by one year in order to address document management before Administration moves to swing space.

This project is revised from the prior submission, which had included phased funding in FY19 and FY20. This request is for full funding in FY20. Project costs have adjusted slightly as a result of eliminating the phasing.

Parameters Addressed:

Technology: The School Instructional Technology Department is in support of this request.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: School Document Management System

Fiscal Year:

2020

Supplemental Information

Document Management Purchase & Document Conversion Expense

Emergy Grover <u>Active Files</u>	# Cabinets <u>Small (1)</u>	# Cabinets <u>Large (2)</u>	Cubic <u>Feet</u>	Calculated <u># Boxes</u>	Calculated <u>Pages</u>	Box Pickup <u>Service (3)</u>	Scanning <u>Service</u>	Total <u>Cost</u>	
Human Resources	3	9	312	260	689,000	650	44,785	45,435	
Financial Operations	0	0	-	-	-	-	-	-	
Payroll	0	0	-	-	-	-	-	-	
Food Service	0	0	-	-	-	-	-	-	
Special Education	24	11	544	453	1,201,333	1,133	78,087	79,220	
Subtotal	27	20	856	713	1,890,333	1,783	122,872	124,655	
<u>Other Files</u>									
Financial Operations	0	0	-	-	-	-	-	-	Assume major storage is IV
Subtotal	0	0	-	-	-	-	-	-	
Grand total	27	20	856	713	1,890,333	1,783	122,872	124,655	
								125,000	

(1) Small: 1'W x 4'H x 2'D

8 Cubic Feet

(2) Small: 4'W x 4'H x 2'D

32 Cubic Feet

(3) Pickup estimate is \$2.50/box

(3) Estimated cost of prepping, scanning, indexing is \$0.05 - \$0.08/page. Estimate based on \$0.065/page mid-rate.

Conversion

1 Small Bankers Box = 1.2 Cubic Feet

1 Small Bankers Box = 2650 Pages

Document Management
Purchase & Installation

			Software Acquisition	Document Conversion	Total Cost	
2015 Acquisition Cost	FY16	Doc Star	32,000	125,000	157,000	
x Escalation	FY17	3%	33,000	128,800	161,800	
x Escalation	FY18	3%	34,000	132,700	166,700	
x Escalation	FY19	3%	35,000	136,700	171,700	
x Escalation	FY20	3%	36,100	140,800	176,900	Conversion Completed Prior to EG Renovation
					176,900	

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: School New and Replacement Furniture **Fiscal Year:** 2019

Purpose:	Acquisition	Classification:	Equipment	Status:	Amended Request from the Prior CIP
Department:	Needham Public Schools			Supports:	Public Education
Partners:				Useful Life:	

Parameters	Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	No
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	No
6. If funded, will additional permanent staff be required?	No
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	No
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	No
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	No
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	\$180,500	How was the Project Cost Determined:	Industry References
Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$0							
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$0							
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$180,500	\$60,500	\$45,000	\$25,000	\$25,000	\$25,000		
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$180,500	\$60,500	\$45,000	\$25,000	\$25,000	\$25,000	\$0	\$0

\$0

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: School New and Replacement Furniture

Fiscal Year: 2019

Project Description and Considerations

This request continues the replacement cycle for school furniture in poor and fair at the Schools. Furniture at the Pollard Middle School is 25-30+ years old and in a state of disrepair after decades of heavy use.

In FY05 Town Meeting approved funding of \$20,500 to begin the replacement of furniture in poor condition. By FY15, all furniture in 'poor' condition was replaced in the schools. The FY19-FY23 funding request will continue with the replacement of furniture in fair condition at Pollard and in addition, these funds will be used for new classroom furniture as needed. In FY19 \$30,500 will be used to reface the cabinets in three Pollard science classrooms and to install new counters in four science classrooms. The poor condition of these cabinets is depicted in the sample photo below. An additional \$30,000 is requested in FY19 to purchase classroom furniture for Needham High School. In FY20, \$20,000 is budgeted to complete the replacement of furniture in 'fair' condition at Pollard School. Starting in FY20, \$25,000 per year also is allocated to purchase new or classroom furniture as necessary in all school buildings.

This request is revised from the prior year to add an FY23 funding request and to direct replacement funding to Pollard in FY19 and FY20.

The anticipated furniture replacement schedule is depicted below:

Funding Plan	Request FY19	Request FY20	Request FY21	Request FY22	Request FY23	TOTAL
Pollard	\$30,500.00	\$20,000.00	\$0.00	\$0.00	\$0.00	\$50,500.00
New Classrooms	\$30,000.00	\$25,000.00	\$25,000.00	\$25,000.00	\$25,000.00	\$130,000.00
	\$60,500.00	\$45,000.00	\$25,000.00	\$25,000.00	\$25,000.00	\$180,500.00



Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: School Phone System Replacement **Fiscal Year:** 2019

Purpose:	Acquisition	Classification:	Equipment	Status:	New Request
Department:	Needham Public Schools			Supports:	Public Education
Partners:				Useful Life:	

Parameters **Response**

1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?	No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?	No
3. Does this project require any permitting by any Town or State agency?	No
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?	Yes
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?	Yes
6. If funded, will additional permanent staff be required?	No
7. If funded, will the operating budget need to be increased to cover operating expenses?	No
8. If funded, will this project lower the requesting Department's operating costs?	Yes
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?	No
10. If the project is NOT funded, will current Town revenue be reduced?	Yes
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?	No
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?	No
13. Is this a request in response to a Court, Federal, or State order?	No
14. Is this a request in response to a documented public health or safety condition?	No
15. Is this a request to improve or make repairs to extend the useful life of a building?	No
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?	No
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?	No
18. Will any other department be required to provide assistance in order to complete the project?	Yes
19. If funded, will this project increase the operating expense for any other department?	No

Project Cost:	\$319,000	How was the Project Cost Determined:	Industry References
Budget Impact:	The project should reduce the operating expenses		

Project Budget Elements	Project Budget	2019	2020	2021	2022	2023	2024	2025
Planning/Feasibility	\$0							
Design/Engineering	\$0							
Land/ROW Acquisition	\$0							
Site Preparation	\$0							
Construction	\$0							
Construction Management	\$0							
Equipment	\$0							
Furniture, Fixtures, and Equipment	\$319,000	\$88,000	\$114,000	\$117,000				
Technology Hardware/Software	\$0							
Other Expenses	\$0							
TOTAL	\$319,000	\$88,000	\$114,000	\$117,000	\$0	\$0	\$0	\$0

\$0

Capital Project Request

Project Title: School Phone System Replacement

Fiscal Year:

2019

Project Description and Considerations

The telephone system currently in use by the School Department consists of 8 separate phone systems of varying ages from 5 to over 15 year old (estimated.) The systems employ manufacturer discontinued equipment, are unstable and are in constant need of repair. The phone systems in three buildings - Hillside, Mitchell and Emery Grover - have failed, leaving the buildings with no phone access. All systems require frequent repairs, which can only be done by a contract technician via a technical service maintenance appointment. The existing system, in addition to being old and unstable, runs on antiquated PBX technology that uses traditional Verizon POTS (copper) lines for external calls and Centrex to connect internally within a network of Town departments. This type of system supports a limited number of concurrent external connections per building and a limited number of concurrent Centrex connections per building; when concurrent lines are maximized within a building, users receive a busy signal until a line becomes available. Accessibility of the current voicemail system also is a concern particularly for teachers who transition to different classrooms and locations throughout the day; their voicemail is only available from their "home" location. The monthly invoice reconciliations are time consuming for Public Facilities staff and the level of customer service through Verizon is very poor. Finally, the Centrex system is expensive to operate - in FY16, over \$78,000 was spent on service and maintenance calls, including \$55,000 for service and \$23,000 for maintenance.

This request would replace the antiquated PBX system with a new phone system that would combine all of the buildings into a unified IP-based phone system. The new system would utilize our fiber network and pooled SIP trunks to reduce overall cost while maintaining a secure, robust and reliable phone system. It would allow for 'tiered' user licenses that are customized to roles and responsibilities. Administrative staff would be able to update accounts without the assistance of an outside vendor during a maintenance call. The system would have all the features of a modern phone system, such as voicemail-to-email, callerID, presence, conference calling, unified contacts, 'do not disturb' and softphones. The School Department would manage the new technology-based system, which would no longer be maintained by the Public Facilities Department as a 'utility.' Finally, the Town's annual operational expense associated with maintaining the system would diminish significantly. Preliminary estimates suggest that the associated operating expense could be reduced from approximately \$78,000 to \$39,000 per year.

This proposal is to purchase a new, unified phone system for all school buildings, according to a phased implementation plan. In Year 1 (FY19), the system would be implemented for School Administration, and the Mitchell and High Rock schools. In Year 2, the Williams, NHS and Eliot School systems would be installed. In Year 3, the system at Broadmeadow, Pollard and Newman would be replaced. During the phased roll-out, Public Facilities would continue to manage and maintain the existing systems. Upon full installation, the Verizon and CTI service contracts with the Town could be terminated and the Town's operating budget reduced. A chart summarizing the projected capital and operating impact of the new system is shown below, derived from industry references.

Town of Needham
 Capital Improvement Plan
 January 2018

Capital Project Request

Project Title: School Phone System Replacement

Fiscal Year: 2019

Supplemental Information

3-year Plan Harbor Networks

	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>Grand Total</u>
EG		\$37,000				\$37,000
Mitchell		\$27,000				\$27,000
HighRock		\$24,000				\$24,000
NHS			\$71,000			\$71,000
Hillside/Williams			\$20,000			\$20,000
Eliot			\$23,000			\$23,000
Broadmeadow				\$30,000		\$30,000
Pollard				\$46,000		\$46,000
Newman				\$41,000		\$41,000
Capital Plan		\$88,000	\$114,000	\$117,000		\$319,000

Annual Software Assurance Expense (SWA) Operating Expense*

	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>
EG			\$3,000	\$3,000	\$3,000
Mitchell			\$2,000	\$2,000	\$2,000
HighRock			\$2,000	\$2,000	\$2,000
NHS				\$7,000	\$7,000
Hillside/Williams				\$2,000	\$2,000
Eliot				\$2,000	\$2,000
Broadmeadow					\$3,000
Pollard					\$4,000
Newman					\$4,000
Total SWA Expense			\$7,000	\$18,000	\$29,000

to be offset by decreasing Verizon ECTI expense carried on Town Budget (FY16 est \$78,151)

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request										
Project Title: Sustain the Hillside School as Swing Space for Future Town Use					Fiscal Year: 2021					
Purpose:		Construction	Classification:		Building	Status:		Same Request from the Prior CIP		
Department:		Needham Public Schools				Supports:		Public Education		
Partners:						Useful Life:		More than eighteen (18) years		
Parameters								Response		
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?								Yes		
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?								No		
3. Does this project require any permitting by any Town or State agency?								Yes		
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?								Yes		
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?								Yes		
6. If funded, will additional permanent staff be required?						Total New FTE's:		No		
7. If funded, will the operating budget need to be increased to cover operating expenses?								Yes		
8. If funded, will this project lower the requesting Department's operating costs?								No		
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?								No		
10. If the project is NOT funded, will current Town revenue be reduced?								No		
11. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?								No		
12. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?								No		
13. Is this a request in response to a Court, Federal, or State order?								No		
14. Is this a request in response to a documented public health or safety condition?								No		
15. Is this a request to improve or make repairs to extend the useful life of a building?								Yes		
16. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?								No		
17. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?								No		
18. Will any other department be required to provide assistance in order to complete the project?								Yes		
19. If funded, will this project increase the operating expense for any other department?								Yes		
Project Cost:		\$18,960,500	How was the Project Cost Determined:			Hired Consultant				
Budget Impact:		May increase annual operating expenses by more than \$100,000								
Project Budget Elements		Project Budget	2019	2020	2021	2022	2023	2024	2025	
Planning/Feasibility		\$100,000			\$100,000					
Design/Engineering		\$2,607,400				\$2,607,400				
Land/ROW Acquisition		\$0								
Site Preparation		\$0								
Construction		\$13,969,600					\$13,969,600			
Construction Management		\$651,900					\$651,900			
Equipment		\$0								
Furniture, Fixtures, and Equipment		\$1,631,600					\$1,631,600			
Technology Hardware/Software		\$0								
Other Expenses		\$0								
TOTAL		\$18,960,500	\$0	\$0	\$100,000	\$2,607,400	\$16,253,100	\$0	\$0	
Total		\$0								

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Sustain the Hillside School as Swing Space for Future Town Use

Fiscal Year:

2021

Project Description and Considerations

Constructed in 1960, the Hillside Elementary School has undergone both addition and renovation (with modulars) over the past 40 years, but is in need of total replacement to address building deficiencies and modernize the learning environment. Several options for renovating/reconstructing this facility are presented in this Capital Improvement Program request.

This is a project to modernize the existing Hillside School for use as swing space for other school and Town projects, after the new Hillside school opens in September 2020 (FY21.) A potential schedule for use of this swing space is: Emery Grover Renovation (FY21-FY22 - prior to modernizing the building), Mitchell Renovation (FY27-FY28), Pollard Renovation (FY29-FY30.) This schedule assumes that modernization will take up to two years to complete, and that relocating the Emery Grover population to the Hillside school is preferable to leasing office space for use during that construction project.

This cost and scope of this project is based on the "Option A" 'base repair project estimate developed by Dore & Whittier Architects in 2014 and renovates the existing Hillside School to update all major building systems to comply with current codes and regulations. (It is the renovation option best described as the 'base repair' scenario for comparative purposes.) The scope of this option does NOT include adding modular classrooms to accommodate the Mitchell School population or a full grade of Pollard students. The Feasibility Study scope should update the above preliminary cost estimate to include the needed modular component, as well as a comparative analysis of the relative cost effectiveness of an alternate project to demolish the school and create modular swing space on this site.

This project is revised from prior years to reflect a July 2024 completion date and a 5% inflation escalator for fiscal years beginning FY17.

Preliminary Project Schedule:

Feasibility Design: FY21

Design: FY22

Override Ballot Question: FY22

Site Construction: FY23-FY24

Modernized Hillside Opens: July, 2024

Parameters Addressed:

Project Costs Not Included: See Project Budget narrative above.

Permitting: As required by Town Boards.

Technology: The School Instructional Technology Department is in support of this request. The estimated project cost includes anFF&E budget for this new facility, including classroom technology.

Building Improvements: The PPBC and Public Facilities Department support this request.

Operating Budget Increase: Improvements to HVAC, electrical system may increase building maintenance expense by more than \$100,000/year. This placeholder estimate to be revised during design process.

Town of Needham
Capital Improvement Plan
January 2018

Capital Project Request

Project Title: Sustain the Hillside School as Swing Space for Future Town Use

Fiscal Year:

2021

Supplemental Information

**Hillside School Modernization, Based on 2014 Dore & Whittier PreFeasibility Study
Option A, Repair Hillside School for 430 Students
Scheduled opening: July 2024 (FY25)**

45,005 SF Building		Feasibility	Construction*	A/E	FF&E	Constr Mgnt	Total	Cost/SF
FY14 Project Cost (D&W)		-	8,835,814	1,649,200	1,032,000	412,300	11,929,314	
TOTAL		-	8,835,814	1,649,200	1,032,000	412,300	11,929,314	\$265
		0%	74%	14%	9%	3%	100%	
6.00%	FY15 Cost Multiplier @ 6%	-	9,365,963	1,748,152	1,093,920	437,038	12,645,073	\$281
6.00%	FY16 Cost Multiplier @ 6%	-	9,927,921	1,853,041	1,159,555	463,260	13,403,777	\$298
5.00%	FY17 Cost Multiplier @ 3.8%	-	10,424,317	1,945,693	1,217,533	486,423	14,073,966	\$313
5.00%	FY18 Cost Multiplier @ 3.8%	-	10,945,532	2,042,978	1,278,410	510,744	14,777,664	\$328
5.00%	FY19 Cost Multiplier @ 3.8%	-	11,492,809	2,145,127	1,342,330	536,282	15,516,548	\$345
5.00%	FY20 Cost Multiplier @ 3.8%	-	12,067,450	2,252,383	1,409,447	563,096	16,292,375	\$362
5.00%	FY21 Cost Multiplier @ 3.8%	100,000	12,670,822	2,365,002	1,479,919	591,251	17,206,994	\$382
5.00%	FY22 Cost Multiplier @ 3.8%	100,000	13,304,363	2,483,252	1,553,915	620,813	18,062,343	\$401
5.00%	FY23 Cost Multiplier @ 3.8%	100,000	13,969,581	2,607,415	1,631,611	651,854	18,960,461	\$421
9 Years	TOTAL PROJECT COST	100,000	13,969,581	2,607,415	1,631,611	651,854	18,960,461	\$421
	TOTAL COST (ROUNDED)	100,000	13,969,600	2,607,400	1,631,600	651,900	18,960,500	\$421

* Excludes modular temporary classrooms

Square Footage 45,005

Note - costs escalated at rates shown above, to midpoint of construction (FY23). There are 2 construction years, FY23 and FY24. Modernized Hillside opens July 2024 (FY25.) Mitchell moves to swing space FY23. FY21 is feasibility funding year; FY22 is schematic design & full funding year;

	FY21	FY22	FY23	
Feasibility	100,000			100,000
Arch/Engineering		2,607,400		2,607,400
<u>Construction</u>			16,253,100	16,253,100
	100,000	2,607,400	16,253,100	18,960,500