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Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: 470 Dedham Avenue Boiler Replacement						Fiscal Year: 2021	
Request Type:	Construction	Classification:	Building	Primary Purpose:	Public Works	Status:	Existing Project
Department:	PW Building Maintenance			Useful Life:	More than 15 Years	Project Cost:	\$460,000
How was the Project Cost Determined:		Industry References		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							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?							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?							Yes
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							Yes
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							No
12. Is this a request in response to a Court, Federal, or State order?							No
13. Is this a request in response to a documented public health or safety condition?							No
14. Is this a request to improve or make repairs to extend the useful life of a building?							Yes
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							Yes
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No
17. Will any other department be required to provide assistance in order to complete the project?							No
18. If funded, will this project increase the operating expense for any other department?							No
19. If funded, will additional permanent staff be required?							No
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		The boiler at the DPW garage was installed in 1961 and is past its useful life. It has required a number of significant repairs recently in order to keep it working. Previously, the Town has had to bring in a temporary boiler during the winter season to maintain heat in the facility while the boiler was down, as there is no redundancy in the heating system. The boilers' age and style do not meet efficiency standards and previous replacement projects have brought an estimated 15-20% energy cost savings. The existing boiler will be removed and replaced with two high efficiency condensing boilers that use natural gas to gain redundancy. This will ensure that should anything happen to one boiler, the building will still have sufficient heat to keep the pipes from freezing. This will also make the building more energy efficient. The design will also include addressing the heat piping throughout the building.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction		\$460,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$460,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	470 Dedham Avenue Boiler Replacement	Fiscal Year:	2021

Supplemental Information

Clarification of Questions

1. This request is for the construction phase of this project. The design phase was funded in FY2020.
3. This may require Building Permits.
5. This is a Building Maintenance request.
6. This is a DPW request.
14. This request should extend the life of the building.
15. The boiler will be permanently installed at this location.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Center at the Heights Generator Construction						Fiscal Year: 2024	
Request Type:	Construction	Classification:	Building	Primary Purpose:	Community Services	Status:	Existing Project
Department:	PW Building Maintenance			Useful Life:	More than 15 Years	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		
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?						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?						Yes	
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Not Applicable	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						Yes	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						Yes	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		The Center at the Heights (CATH) was not built with an emergency generator. During the construction of the building, there was an ice storm that caused a power outage. The Town realized that there was no place for people to gather with an emergency backup generator that was not in use during the day, either because of school or office occupancy. The CATH was noted as an ideal place for this function, as it could provide a shelter and warming space in addition to the restaurant-grade kitchen. After it was constructed, a portable generator was added to the building. The existing portable generator requires a manual transfer switch to switch the electric load to run off of the generator. It does not support the entire building. It is also currently located in an inconvenient location, taking up a parking space in a parking lot that is already in high demand.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction		\$250,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$250,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Center at the Heights Generator Construction	Fiscal Year:	2024

Supplemental Information

The portable generator at the CATH will be removed and a permanent generator will be installed that has the capacity to carry the entire building. It will be installed in a more appropriate location. It will include an automatic transfer switch so that if the power goes out, the generator would automatically kick on instead of requiring staff to manually make the switch. The existing portable generator will be relocated to the Library and the connection will be reconfigured to be able to hook it up with a manual transfer switch. This request is for the construction phase of this project. Funding for the design phase was requested in FY2023.

Clarification of Questions

1. Funding for the design phase was requested in FY2023.
3. Would require Planning Board approval and Building Permits.
5. This is a Building Maintenance request.
6. This is a DPW request.
7. Preventative maintenance, repairs on generator, and fuel will have to be included in operating expenses. The amount has not yet been determined.
15. The generator will be permanently installed.
17. This project will need to be coordinated with the Department of Health and Human Services.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Center at the Heights Generator Design						Fiscal Year: 2023	
Request Type:	Design/Engineering	Classification:	Building	Primary Purpose:	Community Services	Status:	Existing Project
Department:	PW Building Maintenance			Useful Life:	More than 15 Years	Project Cost:	\$37,500
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							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?							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?							Yes
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							Not Applicable
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							No
12. Is this a request in response to a Court, Federal, or State order?							No
13. Is this a request in response to a documented public health or safety condition?							No
14. Is this a request to improve or make repairs to extend the useful life of a building?							No
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							Yes
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No
17. Will any other department be required to provide assistance in order to complete the project?							Yes
18. If funded, will this project increase the operating expense for any other department?							No
19. If funded, will additional permanent staff be required?							No
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		The Center at the Heights (CATH) was not built with an emergency generator. During the construction of the building, there was an ice storm that caused a power outage. The Town realized that there was no place for people to gather with an emergency backup generator that was not in use during the day, either because of school or office occupancy. The CATH was noted as an ideal place for this function, as it could provide a shelter and warming space in addition to the restaurant-grade kitchen. After it was constructed, a portable generator was added to the building. The existing portable generator requires a manual transfer switch to switch the electric load to run off of the generator. It does not support the entire building. It is also currently located in an inconvenient location, taking up a parking space in a parking lot that is already in high demand.			
Planning/Feasibility							
Design/Engineering		\$37,500					
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$37,500					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Center at the Heights Generator Design	Fiscal Year:	2023

Supplemental Information

The portable generator at the CATH will be removed and a permanent generator will be installed that has the capacity to carry the entire building. It will be installed in a more appropriate location. It will include an automatic transfer switch so that if the power goes out, the generator would automatically kick on instead of requiring staff to manually make the switch. The existing portable generator will be relocated to the Library and the connection will be reconfigured to be able to hook it up with a manual transfer switch. This request is for the design phase of this project. The funding for the construction phase will be requested in FY2024.

Clarification of Questions

1. After the design has been funded and completed, a request for construction will be necessary. Please refer to the separate submission for FY2024.
3. Would require Planning Board approval and Building Permits.
5. This is a Building Maintenance request.
6. This is a DPW request.
7. Preventative maintenance, repairs on generator, and fuel will have to be included in operating expenses. The amount has not yet been determined.
15. The generator will be permanently installed.
17. This project will need to be coordinated with the Department of Health and Human Services.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Center at the Heights Space Utilization Study					Fiscal Year: 2023		
Request Type:	Feasibility Study	Classification:	Building	Primary Purpose:	Community Services	Status:	Informational Only
Department:	PW Building Maintenance			Useful Life:	More than 5 Years	Project Cost:	\$75,000
How was the Project Cost Determined:		Industry References		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							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?							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?							Yes
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							Yes
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							No
12. Is this a request in response to a Court, Federal, or State order?							No
13. Is this a request in response to a documented public health or safety condition?							No
14. Is this a request to improve or make repairs to extend the useful life of a building?							Yes
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							No
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No
17. Will any other department be required to provide assistance in order to complete the project?							Yes
18. If funded, will this project increase the operating expense for any other department?							No
19. If funded, will additional permanent staff be required?							No
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		The Center at the Heights (CATH) building has increased programming and usage as well as extended its hours of operation since opening. Some current concerns are that the outdoor deck on the second floor and the restaurant-grade kitchen are not utilized to their full potential, and that the parking is inadequate. Funding is requested for a space utilization study and assessment of the building needs at the CATH. The study would focus on program, office, and clinical spaces within the building to ensure optimal utilization and program flexibility for participants. The study would also look at the current configuration of the outdoor deck regarding its usage, enhancing and expanding the application of the restaurant-grade kitchen, and a thorough review of parking and building accessibility.			
Planning/Feasibility		\$75,000					
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$75,000					

Capital Improvement Plan
January 2020

Capital Project Request

Project Title: Center at the Heights Space Utilization Study

Fiscal Year: 2023

Supplemental Information

Clarification of Questions

1. This project may identify necessary changes to the facility which could lead to a request for design and construction in another year. No estimate has been determined.
5. This is a Building Maintenance request.
6. This is a DPW request.
14. This request is to improve the usage of the existing space and possibly improve it, depending on the results of the feasibility study.
17. Assistance will be required from the Council on Aging and the Department of Health and Human Services.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Daley Building Upgrades						Fiscal Year: 2023	
Request Type:	Feasibility Study	Classification:	Building	Primary Purpose:	Other (see below for information)	Status:	Existing-Revised Project
Department:	PW Building Maintenance			Useful Life:	More than 30 Years	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		
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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Yes	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						Yes	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0	Project Description and Considerations				
Project Budget Elements		Project Budget		The Daley Building is utilized by Building Maintenance trades staff and supervisors as a shop. This building was originally constructed as a warehouse for the School Department, and additions have been constructed over the years. It has been retrofitted for trades work stations, but the design of the building creates challenges for the retrofitting. The height and location of the loading dock prevents it from being used as such. Specifically, vehicles often get stuck in inclement weather because the loading dock is at an incline. The existing bathroom cannot support the locations staffing and does not contain a shower facility. Staff based out of this building regularly handle materials that would require them to use a shower. The ceilings are too high for trades and office space use. Two supervisors are based out of this building and are often competing with the shop noises and dust.			
Planning/Feasibility		\$50,000					
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$50,000					

Capital Improvement Plan
January 2020

Capital Project Request

Project Title: Daley Building Upgrades

Fiscal Year: 2023

Supplemental Information

All eleven trades are required to track their work through a web based work order system, SchoolDude, and research parts on a computer and there is not an appropriate space to do so. The building is not currently tied into the Town sewage system and has a septic tank. All eight of the heavy overhead doors are manually operated. The existing electrical service is undersized for the building's use. The existing lighting system is outdated, not energy efficient, and insufficient, causing safety hazards because of the type of work being done in the building. None of the floor drains are operational, causing slippery floor conditions. The building does not have a sufficient number of exhaust fans to remove fumes when vehicles are in the building or when work is being done in the building. There is an existing break room for staff to take their lunch, but it does not include a sink or a window. The driveway and parking lot are in poor condition, causing even more problems for the number of vehicles in and out of there daily.

The plan is to conduct a feasibility study to determine how to better utilize the existing space. Significant upgrades would be considered, with a focus on possible reconfigurations to provide a better working environment. This request is for a feasibility study on the building. In FY2025, BMD will request funding for the design phase based off of the feasibility study.

Clarification of Questions

Supports Other: Supports building infrastructure.

1. This request is for a feasibility study that may lead to design and construction costs to be requested in the future.
3. The feasibility study could lead to construction that may trigger Planning Board, Building Department, and Conservation approval.
4. There will be some technology upgrades necessary.
5. This is a Building Maintenance request.
6. This is a DPW request.
14. This request is primarily to extend the life of the building or identify alternatives.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Daley Building Upgrades						Fiscal Year: 2025	
Request Type:	Design/Engineering	Classification:	Building	Primary Purpose:	Other (see below for information)	Status:	Informational Only
Department:	PW Building Maintenance			Useful Life:	More than 30 Years	Project Cost:	
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Yes	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						Yes	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		The Daley Building is utilized by Building Maintenance trades staff and supervisors as a shop. This building was originally constructed as a warehouse for the School Department, and additions have been constructed over the years. It has been retrofitted for trades work stations, but the design of the building creates challenges for the retrofitting. The height and location of the loading dock prevents it from being used as such. Specifically, vehicles often get stuck in inclement weather because the loading dock is at an incline. The existing bathroom cannot support the locations staffing and does not contain a shower facility. Staff based out of this building regularly handle materials that would require them to use a shower. The ceilings are too high for trades and office space use. Two supervisors are based out of this building and are often competing with the shop noises and dust.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$0					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Daley Building Upgrades	Fiscal Year:	2025

Supplemental Information

All eleven trades are required to track their work through a web based work order system, SchoolDude, and research parts on a computer and there is not an appropriate space to do so. The building is not currently tied into the Town sewage system and has a septic tank. All eight of the heavy overhead doors are manually operated. The existing electrical service is undersized for the building's use. The existing lighting system is outdated, not energy efficient, and insufficient, causing safety hazards because of the type of work being done in the building. None of the floor drains are operational, causing slippery floor conditions. The building does not have a sufficient number of exhaust fans to remove fumes when vehicles are in the building or when work is being done in the building. There is an existing break room for staff to take their lunch, but it does not include a sink or a window. The driveway and parking lot are in poor condition, causing even more problems for the number of vehicles in and out of there daily.

The plan is to conduct a feasibility study to determine how to better utilize the existing space. Significant upgrades would be considered, with a focus on possible reconfigurations to provide a better working environment. This request is for the design phase of this project. The funding for the construction phase will be requested in future years.

Clarification of Questions

Supports Other: Supports building infrastructure.

1. This request is for the design phase of the project. Funding for a feasibility study was requested in FY2023. Construction funding will be requested in the future.
3. The feasibility study could lead to construction that may trigger Planning Board, Building Department, and Conservation approval.
4. There will be some technology upgrades necessary.
5. This is a Building Maintenance request.
6. This is a DPW request.
14. This request is primarily to extend the life of the building or identify alternatives.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Emery Grover Partial Window Replacement						Fiscal Year: 2023	
Request Type:	Construction	Classification:	Building	Primary Purpose:	Other (see below for information)	Status:	Informational Only
Department:	PW Building Maintenance			Useful Life:	More than 30 Years	Project Cost:	\$380,000
How was the Project Cost Determined:		Industry References		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							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?							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?							Yes
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							Yes
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							Yes
12. Is this a request in response to a Court, Federal, or State order?							No
13. Is this a request in response to a documented public health or safety condition?							No
14. Is this a request to improve or make repairs to extend the useful life of a building?							Yes
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							Yes
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No
17. Will any other department be required to provide assistance in order to complete the project?							Yes
18. If funded, will this project increase the operating expense for any other department?							No
19. If funded, will additional permanent staff be required?							No
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		<u>Project Summary</u> The eight arched windows on the front of the Emery Grover School Administration building are beyond their expected life span. They are inefficient, resulting in occupant discomfort and needless energy usage in order to maintain the heating and cooling in the building. Replacing these windows will increase energy efficiency. The plan is to remove and replace the eight arched windows with custom, energy efficient arched windows. This request is for the construction phase of the project. The funding for the design was requested in FY2022.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction		\$380,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$380,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Emery Grover Partial Window Replacement	Fiscal Year:	2023

Supplemental Information

Changes from Prior Year Submission

This request has been pushed back to FY23 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. The price has increased slightly due to inflation.

Clarification of Questions

Supports Other: Supports building infrastructure.

1. This request is for the construction. Funding for the design phase was requested in FY2022.
3. Building permits will be required.
5. This is a Building Maintenance request.
6. This is a DPW request.
8. Energy efficiency upgrades will reduce energy costs, but those are no longer included in Building Maintenance's budget.
11. This project may be eligible for CPA funding.
14. This request is necessary to extend the life of the building.
15. The windows will be permanently installed.
17. This request will require assistance from the School Department.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Emery Grover Partial Window Replacement						Fiscal Year: 2022	
Request Type:	Design/Engineering	Classification:	Building	Primary Purpose:	Other (see below for information)	Status:	Informational Only
Department:	PW Building Maintenance			Useful Life:	More than 30 Years	Project Cost:	\$33,000
How was the Project Cost Determined:		Industry References		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							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?							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?							Yes
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							Yes
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							Yes
12. Is this a request in response to a Court, Federal, or State order?							No
13. Is this a request in response to a documented public health or safety condition?							No
14. Is this a request to improve or make repairs to extend the useful life of a building?							Yes
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							Yes
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No
17. Will any other department be required to provide assistance in order to complete the project?							Yes
18. If funded, will this project increase the operating expense for any other department?							No
19. If funded, will additional permanent staff be required?							No
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		<u>Project Summary</u> The eight arched windows on the front of the Emery Grover School Administration building are beyond their expected life span. They are inefficient, resulting in occupant discomfort and needless energy usage in order to maintain the heating and cooling in the building. Replacing these windows will increase energy efficiency. The plan is to remove and replace the eight arched windows with custom, energy efficient arched windows. This request is for the design phase of the project. Funding for the construction phase will be requested in FY2023.			
Planning/Feasibility							
Design/Engineering		\$33,000					
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$33,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Emery Grover Partial Window Replacement	Fiscal Year:	2022

Supplemental Information

Changes from Prior Year Submission

This request has been pushed back to FY22 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. The price has increased slightly due to inflation.

Clarification of Questions

Supports Other: Supports building infrastructure.

1. This request is for the design. Funding for the construction phase will be requested in FY2023.
3. Building permits will be required.
5. This is a Building Maintenance request.
6. This is a DPW request.
8. Energy efficiency upgrades will reduce energy costs, but those are no longer included in Building Maintenance's budget.
11. This project may be eligible for CPA funding.
14. This request is necessary to extend the life of the building.
15. The windows will be permanently installed.
17. This request will require assistance from the School Department.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Emery Grover Roof Replacement						Fiscal Year: 2023	
Request Type:	Construction	Classification:	Building	Primary Purpose:	Other (see below for information)	Status:	Existing-Revised Project
Department:	PW Building Maintenance			Useful Life:	More than 20 Years	Project Cost:	\$230,000
How was the Project Cost Determined:		Industry References		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						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?						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?						Yes	
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Yes	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						Yes	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						Yes	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						Yes	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						Yes	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		<u>Project Summary</u> The existing roof at the Emery Grover School Administration building is slate and is over 100 years old. The life expectancy of a slate roof is 75 years, so this roof is well beyond that and poses continual maintenance problems. The roof has serious leakage problems, which have historically caused significant damage to the flooring and interruption to the building. This roof will be replaced with a new environmentally conscious material that mimics the aesthetics of slate, but is composed of recycled rubber from tires. This material would reduce the cost of installation and maintenance. This project is pending the results of the Emery Grover feasibility study. This request is for the construction phase of the project. Funding for the design was requested in FY2022.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction		\$230,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$230,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Emery Grover Roof Replacement	Fiscal Year:	2023

Supplemental Information

Change from Prior Year Submission

The price has increased slightly due to inflation.

Clarification of Questions

Supports Other: Supports building infrastructure.

1. This is for the construction. Funding for the design was requested in FY2022.
3. Building permits will be required.
5. This is a Building Maintenance request.
6. This is a DPW request.
8. Energy efficiency upgrades will reduce energy costs, which are no longer handled by the Building Maintenance Division.
11. This project may be eligible for CPA funding.
14. This request is necessary to extend the life of the building.
15. The roof will be permanently installed.
17. This request will require assistance from the School Department.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Emery Grover Roof Replacement						Fiscal Year: 2022	
Request Type:	Design/Engineering	Classification:	Building	Primary Purpose:	Other (see below for information)	Status:	Existing-Revised Project
Department:	PW Building Maintenance			Useful Life:	More than 20 Years	Project Cost:	\$18,000
How was the Project Cost Determined:		Industry References		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							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?							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?							Yes
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							Yes
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							Yes
12. Is this a request in response to a Court, Federal, or State order?							No
13. Is this a request in response to a documented public health or safety condition?							No
14. Is this a request to improve or make repairs to extend the useful life of a building?							Yes
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							Yes
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No
17. Will any other department be required to provide assistance in order to complete the project?							Yes
18. If funded, will this project increase the operating expense for any other department?							No
19. If funded, will additional permanent staff be required?							No
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		<u>Project Summary</u> The existing roof at the Emery Grover School Administration building is slate and is over 100 years old. The life expectancy of a slate roof is 75 years, so this roof is well beyond that and poses continual maintenance problems. The roof has serious leakage problems, which have historically caused significant damage to the flooring and interruption to the building. This roof will be replaced with a new environmentally conscious material that mimics the aesthetics of slate, but is composed of recycled rubber from tires. This material would reduce the cost of installation and maintenance. This project is pending the results of the Emery Grover feasibility study. This request is for the design phase of the project. Funding for the construction phase will be requested in FY2023.			
Planning/Feasibility							
Design/Engineering		\$18,000					
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$18,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Emery Grover Roof Replacement	Fiscal Year:	2022

Supplemental Information

Change from Prior Year Submission

The price has increased slightly due to inflation.

Clarification of Questions

Supports Other: Supports building infrastructure.

1. This is for the design. The funding for the construction will be requested in FY2023.
3. Building permits will be required.
5. This is a Building Maintenance request.
6. This is a DPW request.
8. Energy efficiency upgrades will reduce energy costs, which are no longer handled by the Building Maintenance Division.
11. This project may be eligible for CPA funding.
14. This request is necessary to extend the life of the building.
15. The roof will be permanently installed.
17. This request will require assistance from the School Department.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Energy Efficient Upgrades						Fiscal Year: 2021	
Request Type:	Design/Engineering	Classification:	Building	Primary Purpose:	Other (see below for information)	Status:	Existing-Revised Project
Department:	PW Building Maintenance			Useful Life:	More than 15 Years	Project Cost:	\$100,000
How was the Project Cost Determined:		Hired Consultant		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						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?						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?						Yes	
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Yes	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						Yes	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						Yes	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						Yes	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		This article is to continuously make energy efficient upgrades throughout Town and School buildings. Each year, the Building Maintenance Division submits a request to fund various projects to increase energy efficiency throughout the Town. <u>Project Summary</u> In 2011, the Town conducted an engineering study for energy upgrades on the 10 oldest buildings. The results of this study showed that by making an initial investment in recommended energy upgrades, the cost of these upgrades will pay for themselves within 10 years. The division has continued to make upgrades each year.			
Planning/Feasibility							
Design/Engineering		\$100,000					
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$100,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Energy Efficient Upgrades	Fiscal Year:	2021

Supplemental Information

Energy Efficiency Study

The existing energy efficiency study recommendations have been exhausted. Technologies have improved and changed for energy efficiency. Buildings that were not originally evaluated due to their age are now eligible for possible upgrades. This study will produce recommendations for future improvements to be funded out of the operating budget or this article. Future articles will request funding for the projects recommended in the results of this study.

Clarification of Questions

Supports Other: Supports building infrastructure.

1. This request is for a study to suggest future energy efficiency projects. Funding for these projects will be requested in future years' Energy Efficiency Upgrades requests.
3. Building, electrical, and plumbing permits will be required.
5. This is a Building Maintenance request.
6. This is a DPW request.
8. Energy efficiency upgrades will reduce energy costs, but these are no longer included in Building Maintenance's budget.
14. This request will modernize building components.
15. Building components will be permanently installed.
17. This request will require cooperation from the occupants of the building(s) being addressed.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Energy Efficient Upgrades						Fiscal Year: 2022	
Request Type:	Construction	Classification:	Building	Primary Purpose:	Other (see below for information)	Status:	Existing-Revised Project
Department:	PW Building Maintenance			Useful Life:	More than 15 Years	Project Cost:	\$100,000
How was the Project Cost Determined:		Hired Consultant		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						Yes	
4. If 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?						Yes	
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Yes	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						Yes	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						Yes	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						Yes	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0	Project Description and Considerations				
Project Budget Elements		Project Budget		This article is to continuously make energy efficient upgrades throughout Town and School buildings. Each year, the Building Maintenance Division submits a request to fund various projects to increase energy efficiency throughout the Town. <u>Project Summary</u> In 2011, the Town conducted an engineering study for energy upgrades on the 10 oldest buildings. The results of this study showed that by making an initial investment in recommended energy upgrades, the cost of these upgrades will pay for themselves within 10 years. The division has continued to make upgrades each year.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction		\$100,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$100,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Energy Efficient Upgrades	Fiscal Year:	2022

Supplemental Information

Retrocommissioning High School HVAC

This is the largest and most complex building in the Town's inventory. It has had phased renovations of varying sizes, including large additions, repurposing of spaces, reconfigurations, etc.

To make sure that the building HVAC system is well integrated, including the 2018 addition, this retrocommissioning will look at rebalancing the building and ensuring that the HVAC is performing efficiently.

Clarification of Questions

Supports Other: Supports building infrastructure.

3. Building, electrical, and plumbing permits will be required.
5. This is a Building Maintenance request.
6. This is a DPW request.
8. Energy efficiency upgrades will reduce energy costs, but these are no longer included in Building Maintenance's budget.
14. This request will modernize building components.
15. Building components will be permanently installed.
17. This request will require cooperation from the occupants of the building(s) being addressed.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Energy Efficient Upgrades						Fiscal Year: 2023	
Request Type:	Construction	Classification:	Building	Primary Purpose:	Other (see below for information)	Status:	Existing-Revised Project
Department:	PW Building Maintenance			Useful Life:	More than 15 Years	Project Cost:	\$100,000
How was the Project Cost Determined:		Hired Consultant		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?							No
3. Does this project require any permitting by any Town or State agency?							Yes
4. If 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?							Yes
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							Yes
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							No
12. Is this a request in response to a Court, Federal, or State order?							No
13. Is this a request in response to a documented public health or safety condition?							No
14. Is this a request to improve or make repairs to extend the useful life of a building?							Yes
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							Yes
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No
17. Will any other department be required to provide assistance in order to complete the project?							Yes
18. If funded, will this project increase the operating expense for any other department?							No
19. If funded, will additional permanent staff be required?							No
Total New FTE's:		0	Project Description and Considerations				
Project Budget Elements		Project Budget		This article is to continuously make energy efficient upgrades throughout Town and School buildings. Each year, the Building Maintenance Division submits a request to fund various projects to increase energy efficiency throughout the Town. <u>Project Summary</u> In 2011, the Town conducted an engineering study for energy upgrades on the 10 oldest buildings. The results of this study showed that by making an initial investment in recommended energy upgrades, the cost of these upgrades will pay for themselves within 10 years. The division has continued to make upgrades each year.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction		\$100,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$100,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Energy Efficient Upgrades	Fiscal Year:	2023

Supplemental Information

Future Projects

Replace and/or install variable frequency drives (VFDs) on older equipment. The existing equipment either does not have VFDs or has out of date VFDs. Without efficient VFDs, the HVAC equipment uses more energy and wears out the equipment at a faster rate.

The division will continue to upgrade lighting throughout the buildings to LED. Additionally, the division will start to look at boilers throughout town in order to determine their efficiencies and any improvements that can be made. There are many boilers throughout town with components that are past their useful life.

Recommissioning Newman.

Clarification of Questions

Supports Other: Supports building infrastructure.

3. Building, electrical, and plumbing permits will be required.
5. This is a Building Maintenance request.
6. This is a DPW request.
8. Energy efficiency upgrades will reduce energy costs, but these are no longer included in Building Maintenance's budget.
14. This request will modernize building components.
15. Building components will be permanently installed.
17. This request will require cooperation from the occupants of the building(s) being addressed.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Energy Efficient Upgrades						Fiscal Year: 2024	
Request Type:	Construction	Classification:	Building	Primary Purpose:	Other (see below for information)	Status:	Existing-Revised Project
Department:	PW Building Maintenance			Useful Life:	More than 15 Years	Project Cost:	\$100,000
How was the Project Cost Determined:		Hired Consultant		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						Yes	
4. If 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?						Yes	
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Yes	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						Yes	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						Yes	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						Yes	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		This article is to continuously make energy efficient upgrades throughout Town and School buildings. Each year, the Building Maintenance Division submits a request to fund various projects to increase energy efficiency throughout the Town. <u>Project Summary</u> In 2011, the Town conducted an engineering study for energy upgrades on the 10 oldest buildings. The results of this study showed that by making an initial investment in recommended energy upgrades, the cost of these upgrades will pay for themselves within 10 years. The division has continued to make upgrades each year.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction		\$100,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$100,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Energy Efficient Upgrades	Fiscal Year:	2024

Supplemental Information

Future Projects

Replace and/or install variable frequency drives (VFDs) on older equipment. The existing equipment either does not have VFDs or has out of date VFDs. Without efficient VFDs, the HVAC equipment uses more energy and wears out the equipment at a faster rate.

The division will continue to upgrade lighting throughout the buildings to LED. Additionally, the division will start to look at boilers throughout town in order to determine their efficiencies and any improvements that can be made. There are many boilers throughout town with components that are past their useful life.

Recommissioning Newman.

Clarification of Questions

Supports Other: Supports building infrastructure.

3. Building, electrical, and plumbing permits will be required.

5. This is a Building Maintenance request.

6. This is a DPW request.

8. Energy efficiency upgrades will reduce energy costs, but these are no longer included in Building Maintenance's budget.

14. This request will modernize building components.

15. Building components will be permanently installed.

17. This request will require cooperation from the occupants of the building(s) being addressed.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Energy Efficient Upgrades						Fiscal Year: 2025	
Request Type:	Construction	Classification:	Building	Primary Purpose:	Other (see below for information)	Status:	Existing-Revised Project
Department:	PW Building Maintenance			Useful Life:	More than 15 Years	Project Cost:	\$100,000
How was the Project Cost Determined:		Hired Consultant		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?							No
3. Does this project require any permitting by any Town or State agency?							Yes
4. If 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?							Yes
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							Yes
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							No
12. Is this a request in response to a Court, Federal, or State order?							No
13. Is this a request in response to a documented public health or safety condition?							No
14. Is this a request to improve or make repairs to extend the useful life of a building?							Yes
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							Yes
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No
17. Will any other department be required to provide assistance in order to complete the project?							Yes
18. If funded, will this project increase the operating expense for any other department?							No
19. If funded, will additional permanent staff be required?							No
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		This article is to continuously make energy efficient upgrades throughout Town and School buildings. Each year, the Building Maintenance Division submits a request to fund various projects to increase energy efficiency throughout the Town. <u>Project Summary</u> In 2011, the Town conducted an engineering study for energy upgrades on the 10 oldest buildings. The results of this study showed that by making an initial investment in recommended energy upgrades, the cost of these upgrades will pay for themselves within 10 years. The division has continued to make upgrades each year.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction		\$100,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$100,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Energy Efficient Upgrades	Fiscal Year:	2025

Supplemental Information

Future Projects

Replace and/or install variable frequency drives (VFDs) on older equipment. The existing equipment either does not have VFDs or has out of date VFDs. Without efficient VFDs, the HVAC equipment uses more energy and wears out the equipment at a faster rate.

The division will continue to upgrade lighting throughout the buildings to LED. Additionally, the division will start to look at boilers throughout town in order to determine their efficiencies and any improvements that can be made. There are many boilers throughout town with components that are past their useful life.

Recommissioning Newman.

Clarification of Questions

Supports Other: Supports building infrastructure.

3. Building, electrical, and plumbing permits will be required.

5. This is a Building Maintenance request.

6. This is a DPW request.

8. Energy efficiency upgrades will reduce energy costs, but these are no longer included in Building Maintenance's budget.

14. This request will modernize building components.

15. Building components will be permanently installed.

17. This request will require cooperation from the occupants of the building(s) being addressed.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Facility Assessment for Sustainable Building Management						Fiscal Year: 2024	
Request Type:	Feasibility Study	Classification:	Building	Primary Purpose:	Culture and Leisure	Status:	Existing Project
Department:	PW Building Maintenance			Useful Life:	More than 9 Years	Project Cost:	\$50,000
How was the Project Cost Determined:		Industry References		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							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?							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?							Yes
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							Yes
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							No
12. Is this a request in response to a Court, Federal, or State order?							No
13. Is this a request in response to a documented public health or safety condition?							No
14. Is this a request to improve or make repairs to extend the useful life of a building?							No
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							No
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No
17. Will any other department be required to provide assistance in order to complete the project?							Yes
18. If funded, will this project increase the operating expense for any other department?							No
19. If funded, will additional permanent staff be required?							No
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		The Library is approaching 20 years old and may require upgrades beyond general maintenance. Many of the systems within the building, including HVAC, boilers, and plumbing, are reaching the end of their useful life. A facility assessment will be conducted on the Library to determine the condition of the facility and to identify any major repairs and replacement needs. The assessment will consider HVAC systems, plumbing, roofing, and boilers, in order to create a plan to address future needs.			
Planning/Feasibility		\$50,000					
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$50,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Facility Assessment for Sustainable Building Management	Fiscal Year:	2024

Supplemental Information

Clarification of Questions

1. This request is for a feasibility study. Recommendations will come from this study that could cause the Department to request for more funding.
5. This is a Building Maintenance request.
6. This is a DPW request.
17. This project will need to be coordinated with the Library and possibly be assigned to the Building Design and Construction Department via PPBC.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Facility Assessment for Sustainable Building Management						Fiscal Year: 2025	
Request Type:	Feasibility Study	Classification:	Building	Primary Purpose:	Culture and Leisure	Status:	Existing Project
Department:	PW Building Maintenance			Useful Life:	More than 9 Years	Project Cost:	\$50,000
How was the Project Cost Determined:		Industry References		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							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?							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?							Yes
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							Yes
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							No
12. Is this a request in response to a Court, Federal, or State order?							No
13. Is this a request in response to a documented public health or safety condition?							No
14. Is this a request to improve or make repairs to extend the useful life of a building?							No
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							No
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No
17. Will any other department be required to provide assistance in order to complete the project?							Yes
18. If funded, will this project increase the operating expense for any other department?							No
19. If funded, will additional permanent staff be required?							No
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		The High Rock is approaching 20 years old and may require upgrades beyond general maintenance. Many of the systems within the building, including HVAC, boilers, and plumbing, are reaching the end of their useful life. A facility assessment will be conducted on the High Rockies it work to determine the condition of the facility and to identify any major repairs and replacement needs. The assessment will consider HVAC systems, plumbing, roofing, and boilers, in order to create a plan to address future needs.			
Planning/Feasibility		\$50,000					
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$50,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Facility Assessment for Sustainable Building Management	Fiscal Year:	2025

Supplemental Information

Clarification of Questions

1. This request is for a feasibility study. Recommendations will come from this study that could cause the Department to request for more funding.
5. This is a Building Maintenance request.
6. This is a DPW request.
17. This project will need to be coordinated with the Library and possibly be assigned to the Building Design and Construction Department via PPBC.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Mitchell Restroom						Fiscal Year: 2021	
Request Type:	Construction	Classification:	Building	Primary Purpose:	Public Education	Status:	Existing Project
Department:	PW Building Maintenance			Useful Life:	More than 20 Years	Project Cost:	\$676,700
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						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?						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?						Yes	
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Yes	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						Yes	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						Yes	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		There are currently six restrooms at the Mitchell that are not ADA/MAAB accessible. Many of the existing plumbing fixtures are 40 to 60 years old. The current stalls are not the proper size and do not have grab bars. The urinals and dispensers are not set at the proper height. The sinks do not have insulated pipes. The restrooms do not have the minimum clearance necessary at the entrance nor do they have the appropriate turning radius.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction		\$670,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses		\$6,700					
TOTAL		\$676,700					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Mitchell Restroom	Fiscal Year:	2021

Supplemental Information

The existing restrooms would be upgraded to meet ADA/MAAB requirements. This request would include two additional Staff Only accessible restrooms. In the existing restrooms, the fixtures would be replaced with water saving fixtures. The existing restrooms would also be reconfigured increasing the entranceways and turning circle radius to be ADA accessible. The door hardware and stalls would be upgraded to be the proper size, set at the proper height, and include grab bars. The design phase of this project was funded in FY2020.

Other expenses is an allowance for debt issuance related expenses. The project funding is assumed to be debt.

Clarification of Questions

1. The design cost of this project was funded in FY2020.
3. Building and electrical permits will be required.
5. This is a Building Maintenance request.
6. This is a DPW request.
14. This request will improve the bathrooms and extend their usage.
17. Assistance will be required from the School Department.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Pollard Air Conditioning Construction					Fiscal Year: 2022		
Request Type:	Construction	Classification:	Building	Primary Purpose:	Public Education	Status:	Existing Project
Department:	PW Building Maintenance			Useful Life:	More than 9 Years	Project Cost:	\$1,135,000
How was the Project Cost Determined:		Industry References		Budget Impact:	May increase annual operating expenses between \$5,001 and \$25,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						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?						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?						Yes	
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Yes	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						Yes	
18. If funded, will this project increase the operating expense for any other department?						Yes	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		The Pollard Middle School only has supplemental AC in one third of the building. The comfort and temperature of the educational learning space is an important aspect of school maintenance, especially with school starting in August. Some of the classrooms have very little refuge from direct sunlight, adding to the heat and humidity issues during the warmer months. A lack of temperature and humidity control throughout the building can cause lasting damage to the building. The Pollard is also underutilized during the summer for programming because of the lack of AC, adding strain to other schools.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction		\$1,125,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses		\$10,000					
TOTAL		\$1,135,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Pollard Air Conditioning Construction	Fiscal Year:	2022

Supplemental Information

This request is for the construction funding to install split units to the Pollard to provide the school with air conditioning. The request has changed to include the entire construction funding in one year, providing the division the opportunity to have one contractor do the work, allowing for consistency throughout the project. The work itself may be completed over a longer time period, depending on recommendations made from the designer. Funding for the design phase of this project was requested in FY2021.

Clarification of Questions

1. Funding for the design of this project was requested in FY2021.
3. This may require Building Permits.
5. This is a Building Maintenance request.
6. This is a DPW request.
17. This project will need to be coordinated with the School Department.
18. The building is currently not air conditioned. Installing air conditioning throughout the building will increase energy costs, which are handled by the Needham ELG budget.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Pollard Air Conditioning Design					Fiscal Year: 2021		
Request Type:	Design/Engineering	Classification:	Building	Primary Purpose:	Public Education	Status:	Existing Project
Department:	PW Building Maintenance			Useful Life:	More than 9 Years	Project Cost:	\$100,000
How was the Project Cost Determined:		Industry References		Budget Impact:	May increase annual operating expenses between \$5,001 and \$25,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							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?							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?							Yes
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							Yes
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							No
12. Is this a request in response to a Court, Federal, or State order?							No
13. Is this a request in response to a documented public health or safety condition?							No
14. Is this a request to improve or make repairs to extend the useful life of a building?							No
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							No
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No
17. Will any other department be required to provide assistance in order to complete the project?							Yes
18. If funded, will this project increase the operating expense for any other department?							Yes
19. If funded, will additional permanent staff be required?							No
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		The Pollard Middle School only has supplemental AC in one third of the building. The comfort and temperature of the educational learning space is an important aspect of school maintenance, especially with school starting in August. Some of the classrooms have very little refuge from direct sunlight, adding to the heat and humidity issues during the warmer months. A lack of temperature and humidity control throughout the building can cause lasting damage to the building. The Pollard is also underutilized during the summer for programming because of the lack of AC, adding strain to other schools.			
Planning/Feasibility							
Design/Engineering		\$100,000					
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$100,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Pollard Air Conditioning Design	Fiscal Year:	2021

Supplemental Information

This request would look at the possibilities for adding AC to the building. The funding would be to design and oversee the installation of split units to the building. Funding for the construction phase of this project will be requested in FY2022.

Clarification of Questions

1. After the design has been funded and completed, a request for construction will be necessary. Please refer to the separate submission for FY2022.
3. This may require Building Permits.
5. This is a Building Maintenance request.
6. This is a DPW request.
17. This project will need to be coordinated with the School Department.
18. The building is currently not air conditioned. Installing air conditioning throughout the building will increase energy costs, which are handled by the Needham ELG budget.

Capital Improvement Plan
January 2020

Capital Project Request								
Project Title:		Pollard Locker Room Retrofit					Fiscal Year:	2022
Request Type:	Construction	Classification:	Building	Primary Purpose:	Public Education	Status:	Existing Project	
Department:	PW Building Maintenance			Useful Life:	More than 20 Years	Project Cost:	\$636,300	
How was the Project Cost Determined:		Industry References		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000			
Parameters						Response		
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							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?							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?							Yes	
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							Yes	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							No	
12. Is this a request in response to a Court, Federal, or State order?							No	
13. Is this a request in response to a documented public health or safety condition?							No	
14. Is this a request to improve or make repairs to extend the useful life of a building?							Yes	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							Yes	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No	
17. Will any other department be required to provide assistance in order to complete the project?							Yes	
18. If funded, will this project increase the operating expense for any other department?							No	
19. If funded, will additional permanent staff be required?							No	
Total New FTE's:		0	Project Description and Considerations					
Project Budget Elements		Project Budget		The current locker room layout at the Pollard Middle School is no longer conducive to the needs of the Athletic Department. The school offers diverse sports programs, which requires storage for unique pieces of equipment (field hockey sticks, lacrosse sticks, bags, etc.). The existing lockers are all the same size and with an inability to store a variety of equipment. This causes equipment to be carried by athletes throughout the day or left outside lockers unsecured. The orientation of the locker room creates blind spots that pose a safety concern. The flooring is starting to crack in places due to age. The bathrooms and showers are outdated as well.				
Planning/Feasibility								
Design/Engineering		\$630,000						
Land/ROW Acquisition								
Site Preparation								
Construction								
Construction Management								
Equipment								
Furniture, Fixtures, and Equipment								
Technology								
Other Expenses		\$6,300						
TOTAL		\$636,300						

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Pollard Locker Room Retrofit	Fiscal Year:	2022

Supplemental Information

The division will work with a consultant for the design of retrofitting the locker room in order to make the space more functional for its current usage. Once a design has been decided on, lockers of varying sizes will be installed to accommodate the needs of the students, the flooring will be repaired, the showers, bathroom fixtures, and lighting will be updated, and the room will be painted. This request is for the construction phase of the project. Funding for the design was requested in FY2021.

Clarification of Questions

1. Funding for the design of this project was requested in FY2021.
3. Building, electrical, and plumbing permits will be required.
5. This is a Building Maintenance request.
6. This is a DPW request.
14. This request is necessary to extend the life of the building.
15. All components will be permanently installed.
17. This request will require assistance from the School Department.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Pollard Locker Room Retrofit Design						Fiscal Year: 2021	
Request Type:	Design/Engineering	Classification:	Building	Primary Purpose:	Public Education	Status:	Existing Project
Department:	PW Building Maintenance			Useful Life:	More than 20 Years	Project Cost:	\$60,000
How was the Project Cost Determined:		Industry References		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						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?						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?						Yes	
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Yes	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						Yes	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						Yes	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						Yes	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		The current locker room layout at the Pollard Middle School is no longer conducive to the needs of the Athletic Department. The school offers diverse sports programs, which requires storage for unique pieces of equipment (field hockey sticks, lacrosse sticks, bags, etc.). The existing lockers are all the same size and with an inability to store a variety of equipment. This causes equipment to be carried by athletes throughout the day or left outside lockers unsecured. The orientation of the locker room creates blind spots that pose a safety concern. The flooring is starting to crack in places due to age. The bathrooms and showers are outdated as well.			
Planning/Feasibility							
Design/Engineering		\$60,000					
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$60,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Pollard Locker Room Retrofit Design	Fiscal Year:	2021

Supplemental Information

The division will work with a consultant for the design of retrofitting the locker room in order to make the space more functional for its current usage. Once a design has been decided on, lockers of varying sizes will be installed to accommodate the needs of the students, the flooring will be repaired, the showers, bathroom fixtures, and lighting will be updated, and the room will be painted. This request is for the design phase of the project. Funding for the construction phase will be requested in FY2022.

Clarification of Questions

1. After the design has been funded and completed, a request for construction will be necessary. Please refer to the separate submission for FY2022.
3. Building, electrical, and plumbing permits will be required.
5. This is a Building Maintenance request.
6. This is a DPW request.
14. This request is necessary to extend the life of the building.
15. All components will be permanently installed.
17. This request will require assistance from the School Department.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Ridge Hill Demolition						Fiscal Year: 2021	
Request Type:	Construction	Classification:	Building	Primary Purpose:	Other (see below for information)	Status:	New Request
Department:	Town Manager			Useful Life:	More than 30 Years	Project Cost:	\$500,000
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	The project should reduce the operating expenses		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						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?						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?						Yes	
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Yes	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						Yes	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						Yes	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		We are seeking funding for this request at the Special Fall 2020 Town Meeting. This project would include all necessary work to remove all buildings on the Ridge Hill Property site except for the barn. The scope is presently being developed under a feasibility study. Cost considerations include existing site conditions, permanent site restoration requirements, survey, civil, mechanical, electrical, and plumbing engineering, cost estimating, environmental and hazardous materials testing, consultation on historical building status, and moving and storage expenses.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction		\$500,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$500,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Ridge Hill Demolition	Fiscal Year:	2021

Supplemental Information

Clarification of Questions

1. This request is just for the cost to take down the building. It does not include any costs for construction or improvements to the property.
3. This may require Planning Board, Historical Commission, Conservation, Building, and other permitting agencies.
5. BMD supports this request.
6. DPW supports this request.
8. Costs associated with maintaining structures that are going to be removed will be reduced.
13. These buildings are not suitable for occupancy.
17. Assistance from PPBC, Building Design and Construction Department, and DPW will be required.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Upgrade Boiler at Hillside						Fiscal Year: 2023	
Request Type:	Construction	Classification:	Building	Primary Purpose:	Other (see below for information)	Status:	Existing-Revised Project
Department:	PW Building Maintenance			Useful Life:	More than 20 Years	Project Cost:	\$235,000
How was the Project Cost Determined:		Industry References		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							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?							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?							Yes
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							Yes
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							No
12. Is this a request in response to a Court, Federal, or State order?							No
13. Is this a request in response to a documented public health or safety condition?							No
14. Is this a request to improve or make repairs to extend the useful life of a building?							Yes
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							Yes
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No
17. Will any other department be required to provide assistance in order to complete the project?							Yes
18. If funded, will this project increase the operating expense for any other department?							No
19. If funded, will additional permanent staff be required?							No
Total New FTE's:		0	Project Description and Considerations				
Project Budget Elements		Project Budget		The Hillside School currently has two cast iron boilers to heat the building. Boiler #1 has a leak that needs to be repaired. The existing boilers were installed during the renovation in 1998 and are at their 20 year life cycle. A study conducted in 2011 indicated that they should only last for a few more years without major issues. Due to the age of the boilers, many of the parts necessary for continued maintenance are no longer manufactured, so repairing the boilers is becoming increasingly more difficult. Even though the student population of the Hillside will be moving to the new Williams School, the building will still be in regular use as a swing space. The boilers are still necessary to prevent the building from freezing and causing major damage.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction		\$235,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$235,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Upgrade Boiler at Hillside	Fiscal Year:	2023

Supplemental Information

Boiler #1 will be removed and taken apart. The salvageable parts will be kept to provide spare parts for Boiler #2. Boiler #1 will be replaced with a high efficiency condensing boiler. This request is for the construction phase of this project. Funding for the design phase was requested in FY2022.

Changes from Prior Year Submission

This project has been pushed back to FY2023 and the cost has been inflated.

Clarification of Questions

Supports Other: Supports building infrastructure.

1. Funding costs for the design phase of this project were requested in FY2022.
3. This request will require a Building Permit.
5. This is a Building Maintenance request.
6. This is a Public Works request.
14. Upgrading the boiler will help to keep the building in use in the future.
15. The boiler will be permanently installed at the school.
17. Assistance from the School Department will be required.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Upgrade Boiler at Hillside					Fiscal Year: 2022		
Request Type:	Design/Engineering	Classification:	Building	Primary Purpose:	Other (see below for information)	Status:	Existing-Revised Project
Department:	PW Building Maintenance			Useful Life:	More than 20 Years	Project Cost:	\$12,500
How was the Project Cost Determined:		Industry References		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							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?							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?							Yes
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							Yes
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							No
12. Is this a request in response to a Court, Federal, or State order?							No
13. Is this a request in response to a documented public health or safety condition?							No
14. Is this a request to improve or make repairs to extend the useful life of a building?							Yes
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							Yes
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No
17. Will any other department be required to provide assistance in order to complete the project?							Yes
18. If funded, will this project increase the operating expense for any other department?							No
19. If funded, will additional permanent staff be required?							No
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		The Hillside School currently has two cast iron boilers to heat the building. Boiler #1 has a leak that needs to be repaired. The existing boilers were installed during the renovation in 1998 and are at their 20 year life cycle. A study conducted in 2011 indicated that they should only last for a few more years without major issues. Due to the age of the boilers, many of the parts necessary for continued maintenance are no longer manufactured, so repairing the boilers is becoming increasingly more difficult. Even though the student population of the Hillside will be moving to the new Williams School, the building will still be in regular use as a swing space. The boilers are still necessary to prevent the building from freezing and causing major damage.			
Planning/Feasibility							
Design/Engineering		\$12,500					
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$12,500					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Upgrade Boiler at Hillside	Fiscal Year:	2022

Supplemental Information

Boiler #1 will be removed and taken apart. The salvageable parts will be kept to provide spare parts for Boiler #2. Boiler #1 will be replaced with a high efficiency condensing boiler. This request is for the design phase of the project. Funding for the construction phase will be requested in FY2023.

Changes from Prior Year Submission

This project has been pushed back to FY2022 and the cost has been inflated.

Clarification of Questions

Supports Other: Supports building infrastructure.

1. Funding costs for the construction phase of this project will be requested in FY2023.
3. This request will require a Building Permit.
5. This is a Building Maintenance request.
6. This is a Public Works request.
14. Upgrading the boiler will help to keep the building in use in the future.
15. The boiler will be permanently installed at the school.
17. Assistance from the School Department will be required.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Needham Crossing Streetscape						Fiscal Year: 2021	
Request Type:	Design/Engineering	Classification:	Infrastructure	Primary Purpose:	Transportation Network	Status:	New Request
Department:	PW General			Useful Life:	More than 20 Years	Project Cost:	\$25,000
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						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?						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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Yes	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						Yes	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		The Town is looking to redesign the streetscape in the Needham Crossing area. This includes assessing the pedestrian amenities and connection opportunity, taking into consideration the recent development as well as future potential growth. Recently, Needham's New England Business Center Zoning District (NEBC) has grown to include TripAdvisor, SharkNinja, NBCUniversal, and multiple hotels. This design would help to improve the streetscape in that area, including planters, seating, trash receptacles, public art, screening, fences, walls, and lighting fixtures. It would also provide recommendations for a pedestrian connection to the Charles River.			
Planning/Feasibility							
Design/Engineering		\$25,000					
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$25,000					

Capital Improvement Plan
January 2020

Capital Project Request

Project Title: Needham Crossing Streetscape

Fiscal Year:

2021

Supplemental Information

Clarification of Questions

1. Additional funding will be required to complete the construction phase of this project, once the design is complete.
3. This may require Planning Board approval.
6. This is a DPW request.
17. This will require assistance from the Economic Development Department.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: NPDES Support Projects						Fiscal Year: 2021	
Request Type:	Construction	Classification:	Infrastructure	Primary Purpose:	Stormwater	Status:	New Request
Department:	PW Engineering			Useful Life:	More than 5 Years	Project Cost:	\$770,500
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						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?						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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						Yes	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		National Pollutant Discharge Elimination System The new 2016 NPDES Regulations are the most sweeping set of stormwater requirements in the last 45 years. The 2016 NPDES Permit requires Needham to continue making substantial changes to the Town's Stormwater Operations, Site Plan, and Subdivision reviews, and the creation of a new Stormwater General Bylaw. Urbanized areas located within Needham have a Small Municipal Separate Storm System (MS4). MS4 Permit only authorizes the discharge of clean stormwater and/or stormwater that does not cause or contribute to an exceedance of water quality standards. The Permit also requires that pollutants in MS4 stormwater discharges be reduced to the maximum extent practicable.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction		\$770,500					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$770,500					

Capital Improvement Plan
January 2020

Capital Project Request

Project Title: NPDES Support Projects

Fiscal Year:

2021

Supplemental Information

Needham is subject to a Total Maximum Daily Load (TMDL) requirement for phosphorus and pathogens. All stormwater discharges from urbanized areas must reduce the amount of phosphorus discharging to waterbodies and the tributaries thereto by 45% and pathogens must be eliminated and/or reduced to the maximum extent practicable through the use of enhanced structural and non-structural BMPs.

Needham has five Water Quality Limited Waters impaired by turbidity, nutrients, organic enrichment, flow dissolved oxygen, priority organics, noxious aquatic plants, exotic species, oil & grease, taste, odor, color, suspended solids, and causes unknown. The five waterbodies impaired are: Alder Brook, Charles River (segment South Natick Dam to Chestnut Street), Charles River (Chestnut Street to Water Dam), Fuller Brook, and Rosemary Brook. All five waterbodies are classified as Category 5 Waters.

Consultant for study to identify within 2 sub-watershed areas:

- Potential testing locations (storm water quality) install testing locations where needed
- Identify Town owned properties for communal/neighborhood infiltration systems
- Identify Park & Recreation areas to reduce impervious and promote surface infiltration
- Identify Building & Facilities areas to reduce impervious and promote surface infiltration
- Identify roadway pavements that can be narrowed or reduced
- Identify 2 targeted audiences for education/outreach and the message we want to send
- Identify 2 participation/involvement measures we want to promote
- Identify O & M plans for the properties within the 2 selected sub-watersheds
- Identify suitable snow dump locations

Dry weather & wet weather testing – 295 outfalls & 20 sub-watershed areas

Construct BMPs

Construct DPW Yard water quality system for parking lot drain system

Develop improvements to SWPPP plan for DPW yard & for RTS

Clean all 1,400 catch basins throughout Town

Clarification of Questions:

1. This is a recurring request.
3. Permits may be required from Conservation, Planning Board, and others.
6. This is a Public Works request.
7. Compliance with the NPDES requirements may require an increase in operating expenses.
15. Equipment will be permanently installed.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Traffic Improvements						Fiscal Year: 2021	
Request Type:	Construction	Classification:	Infrastructure	Primary Purpose:	Transportation Network	Status:	Existing-Revised Project
Department:	PW Engineering			Useful Life:	More than 20 Years	Project Cost:	\$50,000
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	May increase annual operating expenses between \$5,001 and \$25,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						Yes	
4. If 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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						Yes	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						Yes	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						Yes	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		This request will allow for the funding of projects that are recommended by the Traffic Management Advisory Committee (TMAC). The \$50,000 annual request will support one or two TMAC construction related projects per year such as 500 feet of roadway granite curb installation, two school zone installations, two average traffic calming installations, several radar sign installations, sign and/or pavement markings, and pedestrian improvements. <u>Project Summary</u> The goal of the TMAC is to provide for the safety of pedestrians, motorists, and bicyclists. TMAC construction related projects are not presently funded in the Department of Public Works operating			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction		\$50,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$50,000					

Capital Improvement Plan
January 2020

Capital Project Request

Project Title: Traffic Improvements

Fiscal Year:

2021

Supplemental Information

Projects include installing flashing LED pedestrian signs and school zone signs, constructing handicap ramps and cross-walks throughout town, and putting up children playing signs at various locations.

Future Projects

Advisory curve signs with speed tabs on Forest Street

Traffic signal timing adjustments at Great Plain Avenue and Central Avenue

Clarification of Questions

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

6. This is a DPW request.

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.

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

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

18. 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.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: NPDES Support Projects						Fiscal Year: 2022	
Request Type:	Construction	Classification:	Infrastructure	Primary Purpose:	Stormwater	Status:	New Request
Department:	PW Engineering			Useful Life:	More than 5 Years	Project Cost:	\$894,000
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						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?						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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						Yes	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		National Pollutant Discharge Elimination System The new 2016 NPDES Regulations are the most sweeping set of stormwater requirements in the last 45 years. The 2016 NPDES Permit requires Needham to continue making substantial changes to the Town's Stormwater Operations, Site Plan, and Subdivision reviews, and the creation of a new Stormwater General Bylaw. Urbanized areas located within Needham have a Small Municipal Separate Storm System (MS4). MS4 Permit only authorizes the discharge of clean stormwater and/or stormwater that does not cause or contribute to an exceedance of water quality standards. The Permit also requires that pollutants in MS4			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction		\$894,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$894,000					

Capital Improvement Plan
January 2020

Capital Project Request

Project Title: NPDES Support Projects

Fiscal Year:

2022

Supplemental Information

Needham is subject to a Total Maximum Daily Load (TMDL) requirement for phosphorus and pathogens. All stormwater discharges from urbanized areas must reduce the amount of phosphorus discharging to waterbodies and the tributaries thereto by 45% and pathogens must be eliminated and/or reduced to the maximum extent practicable through the use of enhanced structural and non-structural BMPs.

Needham has five Water Quality Limited Waters impaired by turbidity, nutrients, organic enrichment, flow dissolved oxygen, priority organics, noxious aquatic plants, exotic species, oil & grease, taste, odor, color, suspended solids, and causes unknown. The five waterbodies impaired are: Alder Brook, Charles River (segment South Natick Dam to Chestnut Street), Charles River (Chestnut Street to Water Dam), Fuller Brook, and Rosemary Brook. All five waterbodies are classified as Category 5 Waters.

Consultant for study to identify within 2 sub-watershed areas:

- Potential testing locations (storm water quality) install testing locations where needed
- Identify town owned properties for communal/neighborhood infiltration systems
- Identify Park & Recreation areas to reduce impervious and promote surface infiltration
- Identify Building & Facilities areas to reduce impervious and promote surface infiltration
- Identify roadway pavements that can be narrowed or reduced
- Identify 2 targeted audiences for education/outreach and the message we want to send
- Identify 2 participation/involvement measures we want to promote
- Identify O & M plans for the properties within the 2 selected sub-watersheds

Construct BMPs & changes needed to be done at each Town facility/property identified in prior year

Construct testing locations from prior year

Construct improvements to selected snow dump areas

Clarification of Questions:

1. This is a recurring request.
3. Permits may be required from Conservation, Planning Board, and others.
6. This is a Public Works request.
7. Compliance with the NPDES requirements may require an increase in operating expenses.
15. Equipment will be permanently installed.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Permanent Message Boards						Fiscal Year: 2022	
Request Type:	Construction	Classification:	Technology	Primary Purpose:	General Government	Status:	Existing-Revised Project
Department:	PW Engineering	Useful Life:	More than 9 Years	Project Cost:	\$56,000		
How was the Project Cost Determined:		Current Contract	Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000			
Parameters				Response			
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?				No			
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?				No			
3. Does this project require any permitting by any Town or State agency?				Yes			
4. If 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?				Not Applicable			
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?				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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?				No			
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?				No			
12. Is this a request in response to a Court, Federal, or State order?				No			
13. Is this a request in response to a documented public health or safety condition?				No			
14. Is this a request to improve or make repairs to extend the useful life of a building?				No			
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?				Yes			
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?				Yes			
17. Will any other department be required to provide assistance in order to complete the project?				Yes			
18. If funded, will this project increase the operating expense for any other department?				Yes			
19. If funded, will additional permanent staff be required?				No			
Total New FTE's:		0	Project Description and Considerations				
Project Budget Elements		Project Budget		In support of the Board of Selectmen's goals, this request is for permanently installed message boards to communicate with residents. This is the first of a four year request. <u>Project Summaries</u> Currently the Public Works Department has 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 related notifications to residents and commuters. The existing message boards are difficult to maneuver, time consuming to program, and often not available for non-emergency notice.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction		\$56,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$56,000					

Capital Improvement Plan
January 2020

Capital Project Request

Project Title: Permanent Message Boards

Fiscal Year:

2022

Supplemental Information

This project 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 laptop. There will be minimal operating costs, including a data plan to allow for remote updates and electricity for each location. This funding will fund one message board per year.

Central Avenue at Great Plain Avenue

This is a gateway into the Town of Needham and a message board installed at this location would provide information to drivers and pedestrians leaving and entering the Town.

One double sided message board will be permanently installed at this location.

Public Safety Building, School Street and Chestnut Street

This building is positioned near a gateway into the Town of Needham and near the business center. There may be public safety information specific to these departments that could be viewed on a message board at this location.

One message board will be permanently installed at this location.

Fire Station #2

This building is positioned near a gateway into the Town of Needham and near the business center. There may be public safety information specific to these departments that could be viewed on a message board at this location.

One message board will be permanently installed at this location.

Greendale Avenue at Great Plain Avenue

This is a gateway into the Town of Needham and a message board installed at this location would provide information to drivers and pedestrians leaving and entering the Town.

One double sided message board will be permanently installed at this location.

Changes from Prior Year Submission

This project is pushed out until FY22 as the Town is still piloting the use of the message board installed at the RTS in the spring of 2016.

Funding for message boards may be part of the Police and Fire Station Project.

Clarification of Questions

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 add the new message boards to the existing programming software.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Traffic Improvements						Fiscal Year: 2022	
Request Type:	Construction	Classification:	Infrastructure	Primary Purpose:	Transportation Network	Status:	Existing-Revised Project
Department:	PW Engineering			Useful Life:	More than 20 Years	Project Cost:	\$50,000
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	May increase annual operating expenses between \$5,001 and \$25,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						Yes	
4. If 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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						Yes	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						Yes	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						Yes	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		This request will allow for the funding of projects that are recommended by the Traffic Management Advisory Committee (TMAC). The \$50,000 annual request will support one or two TMAC construction related projects per year such as 500 feet of roadway granite curb installation, two school zone installations, two average traffic calming installations, several radar sign installations, sign and/or pavement markings, and pedestrian improvements. <u>Project Summary</u> The goal of the TMAC is to provide for the safety of pedestrians, motorists, and bicyclists. TMAC construction related projects are not presently funded in the Department of Public Works operating			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction		\$50,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$50,000					

Capital Improvement Plan
January 2020

Capital Project Request

Project Title: Traffic Improvements

Fiscal Year:

2022

Supplemental Information

Projects include installing flashing LED pedestrian signs and school zone signs, constructing handicap ramps and cross-walks throughout town, and putting up children playing signs at various locations.

Future Projects

Advisory curve signs with speed tabs on Forest Street

Traffic signal timing adjustments at Great Plain Avenue and Central Avenue

Clarification of Questions

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

6. This is a DPW request.

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.

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

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

18. 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.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: NPDES Support Projects						Fiscal Year: 2023	
Request Type:	Construction	Classification:	Infrastructure	Primary Purpose:	Stormwater	Status:	New Request
Department:	PW Engineering			Useful Life:	More than 5 Years	Project Cost:	\$926,000
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						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?						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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						Yes	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		National Pollutant Discharge Elimination System The new 2016 NPDES Regulations are the most sweeping set of stormwater requirements in the last 45 years. The 2016 NPDES Permit requires Needham to continue making substantial changes to the Town's Stormwater Operations, Site Plan, and Subdivision reviews, and the creation of a new Stormwater General Bylaw. Urbanized areas located within Needham have a Small Municipal Separate Storm System (MS4). MS4 Permit only authorizes the discharge of clean stormwater and/or stormwater that does not cause or contribute to an exceedance of water quality standards. The Permit also requires that pollutants in MS4			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction		\$926,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$926,000					

Capital Improvement Plan
January 2020

Capital Project Request

Project Title: NPDES Support Projects

Fiscal Year:

2023

Supplemental Information

Needham is subject to a Total Maximum Daily Load (TMDL) requirement for phosphorus and pathogens. All stormwater discharges from urbanized areas must reduce the amount of phosphorus discharging to waterbodies and the tributaries thereto by 45% and pathogens must be eliminated and/or reduced to the maximum extent practicable through the use of enhanced structural and non-structural BMPs.

Needham has five Water Quality Limited Waters impaired by turbidity, nutrients, organic enrichment, flow dissolved oxygen, priority organics, noxious aquatic plants, exotic species, oil & grease, taste, odor, color, suspended solids, and causes unknown. The five waterbodies impaired are: Alder Brook, Charles River (segment South Natick Dam to Chestnut Street), Charles River (Chestnut Street to Water Dam), Fuller Brook, and Rosemary Brook. All five waterbodies are classified as Category 5 Waters.

Consultant for study to identify within 2 sub-watershed areas:

- Potential testing locations (storm water quality) install testing locations where needed
- Identify town owned properties for communal/neighborhood infiltration systems
- Identify Park & Recreation areas to reduce impervious and promote surface infiltration
- Identify Building & Facilities areas to reduce impervious and promote surface infiltration
- Identify roadway pavements that can be narrowed or reduced
- Identify 2 targeted audiences for education/outreach and the message we want to send
- Identify 2 participation/involvement measures we want to promote
- Identify O & M plans for the properties within the 2 selected sub-watersheds

Construct BMPs & changes needed to be done at each Town facility/property identified in prior year

Construct testing locations from prior year

Construct improvements to selected snow dump areas

Clarification of Questions:

1. This is a recurring request.
3. Permits may be required from Conservation, Planning Board, and others.
6. This is a Public Works request.
7. Compliance with the NPDES requirements may require an increase in operating expenses.
15. Equipment will be permanently installed.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Permanent Message Boards						Fiscal Year: 2023	
Request Type: Construction	Classification: Technology	Primary Purpose: General Government		Status: Existing-Revised Project			
Department: PW Engineering		Useful Life: More than 9 Years	Project Cost: \$58,000				
How was the Project Cost Determined: Current Contract		Budget Impact: Negligible impact on the annual operating expenses less than \$5,000					
Parameters				Response			
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?				No			
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?				No			
3. Does this project require any permitting by any Town or State agency?				Yes			
4. If 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?				Not Applicable			
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?				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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?				No			
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?				No			
12. Is this a request in response to a Court, Federal, or State order?				No			
13. Is this a request in response to a documented public health or safety condition?				No			
14. Is this a request to improve or make repairs to extend the useful life of a building?				No			
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?				Yes			
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?				Yes			
17. Will any other department be required to provide assistance in order to complete the project?				Yes			
18. If funded, will this project increase the operating expense for any other department?				Yes			
19. If funded, will additional permanent staff be required?				No			
Total New FTE's: 0		Project Description and Considerations					
Project Budget Elements		Project Budget		In support of the Board of Selectmen's goals, this request is for permanently installed message boards to communicate with residents. This is the second of a four year request. <u>Project Summaries</u> Currently the Public Works Department has 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 related notifications to residents and commuters. The existing message boards are difficult to maneuver, time consuming to program, and often not available for non-emergency notice.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction		\$58,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$58,000					

Capital Improvement Plan
January 2020

Capital Project Request

Project Title: Permanent Message Boards

Fiscal Year:

2023

Supplemental Information

This project 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 laptop. There will be minimal operating costs, including a data plan to allow for remote updates and electricity for each location. This funding will fund one message board per year.

Central Avenue at Great Plain Avenue

This is a gateway into the Town of Needham and a message board installed at this location would provide information to drivers and pedestrians leaving and entering the Town.

One double sided message board will be permanently installed at this location.

Public Safety Building, School Street and Chestnut Street

This building is positioned near a gateway into the Town of Needham and near the business center. There may be public safety information specific to these departments that could be viewed on a message board at this location.

One message board will be permanently installed at this location.

Fire Station #2

This building is positioned near a gateway into the Town of Needham and near the business center. There may be public safety information specific to these departments that could be viewed on a message board at this location.

One message board will be permanently installed at this location.

Greendale Avenue at Great Plain Avenue

This is a gateway into the Town of Needham and a message board installed at this location would provide information to drivers and pedestrians leaving and entering the Town.

One double sided message board will be permanently installed at this location.

Changes from Prior Year Submission

This start of this request pushed out until FY22 as the Town is still piloting the use of the message board installed at the RTS in the spring of 2016.

Funding for message boards may be part of the Police and Fire Station Project.

Capital Improvement Plan
January 2020

Capital Project Request

Project Title: Permanent Message Boards

Fiscal Year:

2023

Clarification of Questions

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 add the new message boards to the existing programming software.
6. This is a DPW request.
7. There will be minimal operating costs for these boards which include cellular service for remote programming and electricity.
15. These message boards will be permanently installed at the chosen locations.
16. This request is to improve public property by installing informational message boards.
17. The Town Manager's Office will assist in the programming of these message boards.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Traffic Improvements						Fiscal Year: 2023	
Request Type:	Construction	Classification:	Infrastructure	Primary Purpose:	Transportation Network	Status:	Existing-Revised Project
Department:	PW Engineering			Useful Life:	More than 20 Years	Project Cost:	\$50,000
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	May increase annual operating expenses between \$5,001 and \$25,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						Yes	
4. If 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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						Yes	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						Yes	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						Yes	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		This request will allow for the funding of projects that are recommended by the Traffic Management Advisory Committee (TMAC). The \$50,000 annual request will support one or two TMAC construction related projects per year such as 500 feet of roadway granite curb installation, two school zone installations, two average traffic calming installations, several radar sign installations, sign and/or pavement markings, and pedestrian improvements. <u>Project Summary</u> The goal of the TMAC is to provide for the safety of pedestrians, motorists, and bicyclists. TMAC construction related projects are not presently funded in the Department of Public Works operating			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction		\$50,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$50,000					

Capital Improvement Plan
January 2020

Capital Project Request

Project Title: Traffic Improvements

Fiscal Year:

2023

Supplemental Information

Projects include installing flashing LED pedestrian signs and school zone signs, constructing handicap ramps and cross-walks throughout town, and putting up children playing signs at various locations.

Future Projects

Advisory curve signs with speed tabs on Forest Street

Traffic signal timing adjustments at Great Plain Avenue and Central Avenue

Clarification of Questions

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

6. This is a DPW request.

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.

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

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

18. 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.

Capital Improvement Plan
January 2020

Capital Project Request								
Project Title:		NPDES Support Projects				Fiscal Year:		2024
Request Type:	Construction	Classification:	Infrastructure	Primary Purpose:	Stormwater	Status:	New Request	
Department:	PW Engineering			Useful Life:	More than 5 Years	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			
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?						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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No		
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No		
12. Is this a request in response to a Court, Federal, or State order?						No		
13. Is this a request in response to a documented public health or safety condition?						No		
14. Is this a request to improve or make repairs to extend the useful life of a building?						No		
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						Yes		
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No		
17. Will any other department be required to provide assistance in order to complete the project?						No		
18. If funded, will this project increase the operating expense for any other department?						No		
19. If funded, will additional permanent staff be required?						No		
Total New FTE's:		0	Project Description and Considerations					
Project Budget Elements		Project Budget		National Pollutant Discharge Elimination System The new 2016 NPDES Regulations are the most sweeping set of stormwater requirements in the last 45 years. The 2016 NPDES Permit requires Needham to continue making substantial changes to the Town's Stormwater Operations, Site Plan, and Subdivision reviews, and the creation of a new Stormwater General Bylaw. Urbanized areas located within Needham have a Small Municipal Separate Storm System (MS4). MS4 Permit only authorizes the discharge of clean stormwater and/or stormwater that does not cause or contribute to an exceedance of water quality standards. The Permit also requires that pollutants in MS4				
Planning/Feasibility								
Design/Engineering								
Land/ROW Acquisition								
Site Preparation								
Construction		\$958,000						
Construction Management								
Equipment								
Furniture, Fixtures, and Equipment								
Technology								
Other Expenses								
TOTAL		\$958,000						

Capital Improvement Plan
January 2020

Capital Project Request

Project Title: NPDES Support Projects

Fiscal Year:

2024

Supplemental Information

Needham is subject to a Total Maximum Daily Load (TMDL) requirement for phosphorus and pathogens. All stormwater discharges from urbanized areas must reduce the amount of phosphorus discharging to waterbodies and the tributaries thereto by 45% and pathogens must be eliminated and/or reduced to the maximum extent practicable through the use of enhanced structural and non-structural BMPs.

Needham has five Water Quality Limited Waters impaired by turbidity, nutrients, organic enrichment, flow dissolved oxygen, priority organics, noxious aquatic plants, exotic species, oil & grease, taste, odor, color, suspended solids, and causes unknown. The five waterbodies impaired are: Alder Brook, Charles River (segment South Natick Dam to Chestnut Street), Charles River (Chestnut Street to Water Dam), Fuller Brook, and Rosemary Brook. All five waterbodies are classified as Category 5 Waters.

Consultant for study to identify within 2 sub-watershed areas:

- Potential testing locations (storm water quality) install testing locations where needed
- Identify town owned properties for communal/neighborhood infiltration systems
- Identify Park & Recreation areas to reduce impervious and promote surface infiltration
- Identify Building & Facilities areas to reduce impervious and promote surface infiltration
- Identify roadway pavements that can be narrowed or reduced
- Identify 2 targeted audiences for education/outreach and the message we want to send
- Identify 2 participation/involvement measures we want to promote
- Identify O & M plans for the properties within the 2 selected sub-watersheds

Construct BMPs & changes needed to be done at each Town facility/property identified in prior year

Construct testing locations from prior year

Construct improvements to selected snow dump areas

Clarification of Questions:

1. This is a recurring request.
3. Permits may be required from Conservation, Planning Board, and others.
6. This is a Public Works request.
7. Compliance with the NPDES requirements may require an increase in operating expenses.
15. Equipment will be permanently installed.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Permanent Message Boards						Fiscal Year: 2024	
Request Type:	Construction	Classification:	Technology	Primary Purpose:	General Government	Status:	Existing-Revised Project
Department:	PW Engineering	Useful Life:	More than 9 Years	Project Cost:	\$60,000		
How was the Project Cost Determined:		Current Contract	Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000			
Parameters				Response			
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?				No			
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?				No			
3. Does this project require any permitting by any Town or State agency?				Yes			
4. If 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?				Not Applicable			
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?				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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?				No			
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?				No			
12. Is this a request in response to a Court, Federal, or State order?				No			
13. Is this a request in response to a documented public health or safety condition?				No			
14. Is this a request to improve or make repairs to extend the useful life of a building?				No			
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?				Yes			
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?				Yes			
17. Will any other department be required to provide assistance in order to complete the project?				Yes			
18. If funded, will this project increase the operating expense for any other department?				Yes			
19. If funded, will additional permanent staff be required?				No			
Total New FTE's:		0	Project Description and Considerations				
Project Budget Elements		Project Budget					
Planning/Feasibility		In support of the Board of Selectmen's goals, this request is for permanently installed message boards to communicate with residents. This is the third of a four year request. <u>Project Summaries</u> Currently the Public Works Department has 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 related notifications to residents and commuters. The existing message boards are difficult to maneuver, time consuming to program, and often not available for non-emergency notice.					
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$60,000					

Capital Improvement Plan
January 2020

Capital Project Request

Project Title: Permanent Message Boards

Fiscal Year:

2024

Supplemental Information

This project 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 laptop. There will be minimal operating costs, including a data plan to allow for remote updates and electricity for each location. This funding will fund one message board per year.

Central Avenue at Great Plain Avenue

This is a gateway into the Town of Needham and a message board installed at this location would provide information to drivers and pedestrians leaving and entering the Town.

One double sided message board will be permanently installed at this location.

Public Safety Building, School Street and Chestnut Street

This building is positioned near a gateway into the Town of Needham and near the business center. There may be public safety information specific to these departments that could be viewed on a message board at this location.

One message board will be permanently installed at this location.

Fire Station #2

This building is positioned near a gateway into the Town of Needham and near the business center. There may be public safety information specific to these departments that could be viewed on a message board at this location.

One message board will be permanently installed at this location.

Greendale Avenue at Great Plain Avenue

This is a gateway into the Town of Needham and a message board installed at this location would provide information to drivers and pedestrians leaving and entering the Town.

One double sided message board will be permanently installed at this location.

Changes from Prior Year Submission

This start of this request pushed out until FY22 as the Town is still piloting the use of the message board installed at the RTS in the spring of 2016. Funding for message boards may be part of the Police and Fire Station Project.

Capital Improvement Plan
January 2020

Capital Project Request

Project Title: Permanent Message Boards

Fiscal Year:

2024

Clarification of Questions

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 add the new message boards to the existing programming software.
6. This is a DPW request.
7. There will be minimal operating costs for these boards which include cellular service for remote programming and electricity.
15. These message boards will be permanently installed at the chosen locations.
16. This request is to improve public property by installing informational message boards.
17. The Town Manager's Office will assist in the programming of these message boards.
18. There may be additional software maintenance costs for ITC.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Traffic Improvements						Fiscal Year: 2024	
Request Type:	Construction	Classification:	Infrastructure	Primary Purpose:	Transportation Network	Status:	Existing-Revised Project
Department:	PW Engineering			Useful Life:	More than 20 Years	Project Cost:	\$50,000
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	May increase annual operating expenses between \$5,001 and \$25,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						Yes	
4. If 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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						Yes	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						Yes	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						Yes	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		This request will allow for the funding of projects that are recommended by the Traffic Management Advisory Committee (TMAC). The \$50,000 annual request will support one or two TMAC construction related projects per year such as 500 feet of roadway granite curb installation, two school zone installations, two average traffic calming installations, several radar sign installations, sign and/or pavement markings, and pedestrian improvements. <u>Project Summary</u> The goal of the TMAC is to provide for the safety of pedestrians, motorists, and bicyclists. TMAC construction related projects are not presently funded in the Department of Public Works operating			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction		\$50,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$50,000					

Capital Improvement Plan
January 2020

Capital Project Request

Project Title: Traffic Improvements

Fiscal Year:

2024

Supplemental Information

Projects include installing flashing LED pedestrian signs and school zone signs, constructing handicap ramps and cross-walks throughout town, and putting up children playing signs at various locations.

Future Projects

Advisory curve signs with speed tabs on Forest Street

Traffic signal timing adjustments at Great Plain Avenue and Central Avenue

Clarification of Questions

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

6. This is a DPW request.

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.

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

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

18. 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.

Capital Improvement Plan
January 2020

Capital Project Request								
Project Title:		NPDES Support Projects				Fiscal Year:		2025
Request Type:	Construction	Classification:	Infrastructure	Primary Purpose:	Stormwater	Status:	New Request	
Department:	PW Engineering			Useful Life:	More than 5 Years	Project Cost:	\$991,000	
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000			
Parameters						Response		
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						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?						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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No		
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No		
12. Is this a request in response to a Court, Federal, or State order?						No		
13. Is this a request in response to a documented public health or safety condition?						No		
14. Is this a request to improve or make repairs to extend the useful life of a building?						No		
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						Yes		
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No		
17. Will any other department be required to provide assistance in order to complete the project?						No		
18. If funded, will this project increase the operating expense for any other department?						No		
19. If funded, will additional permanent staff be required?						No		
Total New FTE's:		0		Project Description and Considerations				
Project Budget Elements		Project Budget		National Pollutant Discharge Elimination System The new 2016 NPDES Regulations are the most sweeping set of stormwater requirements in the last 45 years. The 2016 NPDES Permit requires Needham to continue making substantial changes to the Town's Stormwater Operations, Site Plan, and Subdivision reviews, and the creation of a new Stormwater General Bylaw. Urbanized areas located within Needham have a Small Municipal Separate Storm System (MS4). MS4 Permit only authorizes the discharge of clean stormwater and/or stormwater that does not cause or contribute to an exceedance of water quality standards. The Permit also requires that pollutants in MS4				
Planning/Feasibility								
Design/Engineering								
Land/ROW Acquisition								
Site Preparation								
Construction		\$991,000						
Construction Management								
Equipment								
Furniture, Fixtures, and Equipment								
Technology								
Other Expenses								
TOTAL		\$991,000						

Capital Improvement Plan
January 2020

Capital Project Request

Project Title: NPDES Support Projects

Fiscal Year:

2025

Supplemental Information

Needham is subject to a Total Maximum Daily Load (TMDL) requirement for phosphorus and pathogens. All stormwater discharges from urbanized areas must reduce the amount of phosphorus discharging to waterbodies and the tributaries thereto by 45% and pathogens must be eliminated and/or reduced to the maximum extent practicable through the use of enhanced structural and non-structural BMPs.

Needham has five Water Quality Limited Waters impaired by turbidity, nutrients, organic enrichment, flow dissolved oxygen, priority organics, noxious aquatic plants, exotic species, oil & grease, taste, odor, color, suspended solids, and causes unknown. The five waterbodies impaired are: Alder Brook, Charles River (segment South Natick Dam to Chestnut Street), Charles River (Chestnut Street to Water Dam), Fuller Brook, and Rosemary Brook. All five waterbodies are classified as Category 5 Waters.

Consultant for study to identify within 2 sub-watershed areas:

- Potential testing locations (storm water quality) install testing locations where needed
- Identify town owned properties for communal/neighborhood infiltration systems
- Identify Park & Recreation areas to reduce impervious and promote surface infiltration
- Identify Building & Facilities areas to reduce impervious and promote surface infiltration
- Identify roadway pavements that can be narrowed or reduced
- Identify 2 targeted audiences for education/outreach and the message we want to send
- Identify 2 participation/involvement measures we want to promote
- Identify O & M plans for the properties within the 2 selected sub-watersheds

Construct BMPs & changes needed to be done at each Town facility/property identified in prior year

Construct testing locations from prior year

Construct improvements to selected snow dump areas

Clarification of Questions:

1. This is a recurring request.
3. Permits may be required from Conservation, Planning Board, and others.
6. This is a Public Works request.
7. Compliance with the NPDES requirements may require an increase in operating expenses.
15. Equipment will be permanently installed.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Permanent Message Boards						Fiscal Year: 2025	
Request Type: Construction	Classification: Technology	Primary Purpose: General Government		Status: Existing-Revised Project			
Department: PW Engineering		Useful Life: More than 9 Years	Project Cost: \$62,000				
How was the Project Cost Determined: Current Contract		Budget Impact: Negligible impact on the annual operating expenses less than \$5,000					
Parameters				Response			
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?				No			
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?				No			
3. Does this project require any permitting by any Town or State agency?				Yes			
4. If 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?				Not Applicable			
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?				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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?				No			
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?				No			
12. Is this a request in response to a Court, Federal, or State order?				No			
13. Is this a request in response to a documented public health or safety condition?				No			
14. Is this a request to improve or make repairs to extend the useful life of a building?				No			
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?				Yes			
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?				Yes			
17. Will any other department be required to provide assistance in order to complete the project?				Yes			
18. If funded, will this project increase the operating expense for any other department?				Yes			
19. If funded, will additional permanent staff be required?				No			
Total New FTE's: 0		Project Description and Considerations					
Project Budget Elements		Project Budget		In support of the Board of Selectmen's goals, this request is for permanently installed message boards to communicate with residents. This is the final year of a four year request. <u>Project Summaries</u> Currently the Public Works Department has 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 related notifications to residents and commuters. The existing message boards are difficult to maneuver, time consuming to program, and often not available for non-emergency notice.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction		\$62,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$62,000					

Capital Improvement Plan
January 2020

Capital Project Request

Project Title: Permanent Message Boards

Fiscal Year:

2025

Supplemental Information

This project 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 laptop. There will be minimal operating costs, including a data plan to allow for remote updates and electricity for each location. This funding will fund one message board per year.

Central Avenue at Great Plain Avenue

This is a gateway into the Town of Needham and a message board installed at this location would provide information to drivers and pedestrians leaving and entering the Town.

One double sided message board will be permanently installed at this location.

Public Safety Building, School Street and Chestnut Street

This building is positioned near a gateway into the Town of Needham and near the business center. There may be public safety information specific to these departments that could be viewed on a message board at this location.

One message board will be permanently installed at this location.

Fire Station #2

This building is positioned near a gateway into the Town of Needham and near the business center. There may be public safety information specific to these departments that could be viewed on a message board at this location.

One message board will be permanently installed at this location.

Greendale Avenue at Great Plain Avenue

This is a gateway into the Town of Needham and a message board installed at this location would provide information to drivers and pedestrians leaving and entering the Town.

One double sided message board will be permanently installed at this location.

Changes from Prior Year Submission

This start of this request pushed out until FY22 as the Town is still piloting the use of the message board installed at the RTS in the spring of 2016.

Funding for message boards may be part of the Police and Fire Station Project.

Capital Improvement Plan
January 2020

Capital Project Request

Project Title: Permanent Message Boards

Fiscal Year:

2025

Clarification of Questions

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 add the new message boards to the existing programming software.
6. This is a DPW request.
7. There will be minimal operating costs for these boards which include cellular service for remote programming and electricity.
15. These message boards will be permanently installed at the chosen locations.
16. This request is to improve public property by installing informational message boards.
17. The Town Manager's Office will assist in the programming of these message boards.
18. There may be additional software maintenance costs for ITC.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Traffic Improvements						Fiscal Year: 2025	
Request Type:	Construction	Classification:	Infrastructure	Primary Purpose:	Transportation Network	Status:	Existing-Revised Project
Department:	PW Engineering			Useful Life:	More than 20 Years	Project Cost:	\$50,000
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	May increase annual operating expenses between \$5,001 and \$25,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						Yes	
4. If 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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						Yes	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						Yes	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						Yes	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		This request will allow for the funding of projects that are recommended by the Traffic Management Advisory Committee (TMAC). The \$50,000 annual request will support one or two TMAC construction related projects per year such as 500 feet of roadway granite curb installation, two school zone installations, two average traffic calming installations, several radar sign installations, sign and/or pavement markings, and pedestrian improvements. <u>Project Summary</u> The goal of the TMAC is to provide for the safety of pedestrians, motorists, and bicyclists. TMAC construction related projects are not presently funded in the Department of Public Works operating			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction		\$50,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$50,000					

Capital Improvement Plan
January 2020

Capital Project Request

Project Title: Traffic Improvements

Fiscal Year:

2025

Supplemental Information

Projects include installing flashing LED pedestrian signs and school zone signs, constructing handicap ramps and cross-walks throughout town, and putting up children playing signs at various locations.

Future Projects

Advisory curve signs with speed tabs on Forest Street

Traffic signal timing adjustments at Great Plain Avenue and Central Avenue

Clarification of Questions

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

6. This is a DPW request.

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.

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

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

18. 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.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: DPW Specialty Equipment						Fiscal Year: 2021	
Request Type:	Acquisition	Classification:	Equipment	Primary Purpose:	Public Works	Status:	Existing Project
Department:	PW Garage			Useful Life:	More than 9 Years	Project Cost:	\$192,000
How was the Project Cost Determined:		Industry References		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Yes	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						Yes	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		This request is for large equipment that fits the definition of capital but is not included in the fleet request because the equipment is not a registered vehicle. In FY2021, the DPW is requesting funding for a loader mounted snow blower for the Highway Division. This new piece of equipment (which is an addition) will be used to clear gutter lines, parking lots, and loading trucks. <u>Clarification of Questions</u> 6. This is a DPW request.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment		\$192,000					
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$192,000					

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: DPW Specialty Equipment						Fiscal Year: 2022	
Request Type:	Acquisition	Classification:	Equipment	Primary Purpose:	Public Works	Status:	Existing Project
Department:	PW Garage			Useful Life:	More than 9 Years	Project Cost:	\$38,000
How was the Project Cost Determined:		Industry References		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Yes	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						Yes	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		This request is for large equipment that fits the definition of capital but is not included in the fleet request because the equipment is not a registered vehicle. In FY2022, the DPW is requesting funding for a specialty mower for the Parks and Forestry Division. This small mower (Unit 334) performs a second cut on highly maintained baseball fields. It has floating cutting decks that provide a higher quality cut and playing surface, it also lessens the amount of scalping and mower damage to the field compared to the large area mowers. Since this machine has a lighter footprint than the large area mowers, it can cut fields even after heavy rains.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment		\$38,000					
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$38,000					

Capital Improvement Plan
January 2020

Capital Project Request

Project Title: DPW Specialty Equipment

Fiscal Year:

2022

Supplemental Information

Clarification of Questions

6. This is a DPW request.

18. Insurance will be required.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Fleet Refurbishment						Fiscal Year: 2022	
Request Type:	Acquisition	Classification:	Equipment	Primary Purpose:	Transportation Network	Status:	Existing-Revised Project
Department:	PW Garage			Useful Life:	More than 5 Years	Project Cost:	\$150,000
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Yes	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		In FY18, the Fleet Division implemented a refurbishment program for Fleet assets and related components. The goal of this program is to extend the life-cycles of the vehicles, increase operational safety, and eventually reduce reactive maintenance. The funding requests are spread out to allow the Fleet Division time to plan multiple repairs at once, follow procurement practices, and have the work completed. <u>Project Summary</u> To accomplish these extended life-cycles, the Fleet Division must invest additional resources into the planned maintenance of this equipment.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment		\$150,000					
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$150,000					

Capital Improvement Plan
January 2020

Capital Project Request

Project Title: Fleet Refurbishment

Fiscal Year:

2022

Supplemental Information

Rehabilitation work includes corrosion abatement, treatment and refinishing, replacing corroded chassis, air brake tanks or brake valves, rebuilding primary components, replacing suspension and brakes, and updating lighting and reflective striping.

Changes from Prior Year Submission

The Fleet Division has pushed the request for funding back to FY2022 due to a lag in qualified vehicles for refurbishment. The vehicles that are 9-12 years old are not worth refurbishing. Vehicles should be 6-8 years old to be considered for refurbishment. There is also a lack of vendors who perform this type of work, so procuring these services has been an issue.

6. This is a DPW request.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Fleet Refurbishment						Fiscal Year: 2024	
Request Type:	Acquisition	Classification:	Equipment	Primary Purpose:	Transportation Network	Status:	Existing-Revised Project
Department:	PW Garage			Useful Life:	More than 5 Years	Project Cost:	\$150,000
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Yes	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		In FY18, the Fleet Division implemented a refurbishment program for Fleet assets and related components. The goal of this program is to extend the life-cycles of the vehicles, increase operational safety, and eventually reduce reactive maintenance. The funding requests are spread out to allow the Fleet Division time to plan multiple repairs at once, follow procurement practices, and have the work completed. <u>Project Summary</u> To accomplish these extended life-cycles, the Fleet Division must invest additional resources into the planned maintenance of this equipment.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment		\$150,000					
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$150,000					

Capital Improvement Plan
January 2020

Capital Project Request

Project Title: Fleet Refurbishment

Fiscal Year:

2024

Supplemental Information

Rehabilitation work includes corrosion abatement, treatment and refinishing, replacing corroded chassis, air brake tanks or brake valves, rebuilding primary components, replacing suspension and brakes, and updating lighting and reflective striping.

Changes from Prior Year Submission

The Fleet Division has pushed the next request for funding back to FY2024 due to a lag in qualified vehicles for refurbishment. The vehicles that are 9-12 years old are not worth refurbishing. Vehicles should be 6-8 years old to be considered for refurbishment. There is also a lack of vendors who perform this type of work, so procuring these services has been an issue.

6. This is a DPW request.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: DPW Complex						Fiscal Year: 2021	
Request Type:	Design/Engineering	Classification:	Building	Primary Purpose:	Other (see below for information)	Status:	Existing-Revised Project
Department:	PW Highway			Useful Life:	More than 30 Years	Project Cost:	\$3,200,000
How was the Project Cost Determined:		Hired Consultant		Budget Impact:	May increase annual operating expenses between \$5,001 and \$25,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						Yes	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						Yes	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						Yes	
Total New FTE's:		1.5	Project Description and Considerations				
Project Budget Elements		Project Budget		<u>Project Summary</u> This request is for the design component of this project. The construction costs will be requested in FY2023. The current DPW Operations Building at 470 Dedham Avenue 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. Deficiencies exist throughout the building and the DPW site. 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 and site will be required to address the need for stormwater quality mitigation as well as storage and maintenance			
Planning/Feasibility							
Design/Engineering		\$3,200,000					
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$3,200,000					

Capital Improvement Plan
January 2020

Capital Project Request		
Project Title:	DPW Complex	Fiscal Year: 2021

Supplemental Information

In FY15, Town Meeting approved funding for a feasibility study for the appropriate location(s) for a facility to provide various DPW services. Weston & Sampson completed this study in October of 2016, which evaluated the current facility program needs and options for the location of various DPW operations. The Weston & Sampson study determined that the full garage needs could not be met on the existing site. It concluded the project should be implemented in three phases. 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.

Phase I – Temporary Fuel Island - Completed

Phase II – Seasonal Storage Building – In Progress

Phase III A – Public Works Facility (North)

Phase III B – Public Works Facility (South)

Changes from Prior Year Submission

Costs have been inflated 3.5% due to the submission being pushed out a year.

Clarification of Questions

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

2. There are costs for technology, maintenance, etc. that may not be included in this request.

3. Conservation Commission and Building permitting may be required.

4. Technology will be necessary for a DPW Facility.

5. Building Maintenance supports this request.

6. This request is for a DPW Facility.

7. There may be additional expenses to maintain the building.

14. This will be to extend the useful life of the DPW Facility.

17. This will require input from all fuel users, technology, facilities construction, and Building Maintenance.

19. Yes, additional maintenance staff will be required.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: DPW Complex						Fiscal Year: 2023	
Request Type:	Construction	Classification:	Building	Primary Purpose:	Other (see below for information)	Status:	Existing-Revised Project
Department:	PW Highway			Useful Life:	More than 30 Years	Project Cost:	\$38,688,000
How was the Project Cost Determined:		Hired Consultant		Budget Impact:	May increase annual operating expenses between \$5,001 and \$25,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						Yes	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						Yes	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						Yes	
Total New FTE's:		1.5	Project Description and Considerations				
Project Budget Elements		Project Budget		<u>Project Summary</u> This request is for the construction component of this project. The design costs were requested in FY2021. The current DPW Operations Building at 470 Dedham Avenue 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. Deficiencies exist throughout the building and the DPW site. 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 and site will be required to address the need for stormwater quality mitigation as well as storage and maintenance considerations.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction		\$38,688,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$38,688,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	DPW Complex	Fiscal Year:	2023

Supplemental Information

In FY15, Town Meeting approved funding for a feasibility study for the appropriate location(s) for a facility to provide various DPW services. Weston & Sampson completed this study in October of 2016, which evaluated the current facility program needs and options for the location of various DPW operations. The Weston & Sampson study determined that the full garage needs could not be met on the existing site. It concluded the project should be implemented in three phases. 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.

Phase I – Temporary Fuel Island - Completed

Phase II – Seasonal Storage Building – In Progress

Phase III A – Public Works Facility (North)

Phase III B – Public Works Facility (South)

Changes from Prior Year Submission

Costs have been inflated 3.5% due to the submission being pushed out a year.

Clarification of Questions

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

2. There are costs for technology, maintenance, etc. that may not be included in this request.

3. Conservation Commission and Building permitting may be required.

4. Technology will be necessary for a DPW Facility.

5. Building Maintenance supports this request.

6. This request is for a DPW Facility.

7. There may be additional expenses to maintain the building.

14. This will be to extend the useful life of the DPW Facility.

17. This will require input from all fuel users, technology, facilities construction, and Building Maintenance.

19. Yes, additional maintenance staff will be required.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Public Works Infrastructure Program				Fiscal Year: 2021			
Request Type:	Construction	Classification:	Infrastructure	Primary Purpose:	Transportation Network	Status:	Existing Project
Department:	PW Highway			Useful Life:	More than 15 Years	Project Cost:	\$2,415,000
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						Yes	
4. If 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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Yes	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						Yes	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		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. This program consists of multiple categories, each with their own sub-projects. This request is submitted each year, with different projects.			
Planning/Feasibility							
Design/Engineering		\$83,000					
Land/ROW Acquisition							
Site Preparation							
Construction		\$2,332,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$2,415,000					

Capital Project Request			
Project Title:	Public Works Infrastructure Program	Fiscal Year:	2021

Supplemental Information

Project Description and Considerations Continued

Street Resurfacing (\$957,000)

The Town has 279 lane miles of accepted road that require maintenance. The average lifecycle of a road is 15 to 20 years. Specialized surface treatments can be applied within this period to sustain or extend the lifecycle of the roadway based on usage. The Town targets 17 lane miles of road per year in order to resurface roads before they reach the end of their lifecycle. These roads are prioritized based on a pavement condition index (PCI). The Town targets roads with a PCI of under 70 for resurfacing and specialized treatment, under 60 for repair and renovation.

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. Installing a monolithic asphalt berm curb and/or granite curbing better defines the edge of the road, improves drainage, and protects the shoulder from erosion. The cost per lane mile for resurfacing in FY20 is \$86,000 or more per lane mile. A basic asphalt overlay at 1.5 inches with asphalt berm curb and casting adjustments is \$67,000 per lane mile. The cost of micro surfacing treatments and rubber chip seal surfacing treatments are approximately \$5 per square yard.

Roadway Reconstruction

The Town has 279 lane miles of accepted road that require maintenance. Road resurfacing may be the appropriate treatment to extend the useful life of a road, but conditions may require that a total reconstruction of the road is necessary to address structural issues within the road including drainage, grade, and subsurface material construction. 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. The physical condition of the road to be evaluated for improvement includes shape, foundation, and traffic volume. The roads being addressed are deficient in one or more of the areas listed. 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.

Sidewalk Program (\$525,000)

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 Town conducted a study to create a sidewalk condition index. The conclusions of that study identified 80 miles of sidewalk in a condition that would warrant reconstruction. 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. FY20210 contract pricing to reconstruct one mile of asphalt sidewalk with incidental costs is estimated to be \$269,280 per mile (\$51.00/lf). Contract pricing to install a mile of granite curb with minor drainage improvements and incidental costs is estimated to be \$300,960 per mile (\$57.00/lf). These costs do not include engineering, design, tree removal and replacement, major drainage improvements, or major public or private property adjustments.

Capital Project Request

Project Title: Public Works Infrastructure Program

Fiscal Year: 2021

Intersection Improvements

Traffic signals, intersections, and signage require upgrades and reevaluation as infrastructure ages, technology improves, and methods of transportation change. The Engineering Division reviews intersections based on requests identified need from the Highway Division, and traffic patterns and infrastructure changes that put pressure on various intersections throughout Town.

Highland Avenue at West Street (\$650,000)

At this intersection there is aging traffic control infrastructure, with reliability issues. Traffic control signals have been damaged by several car accidents. The traffic control signals only have one timer, which allows for only one traffic pattern regardless of the time of day. This does not allow for the efficient flow of traffic for the intersection. This area is also less aesthetically pleasing.

This work will include installing a new traffic signal system with modern technology that will better control the flow of traffic through the intersection, reducing back-ups of traffic. It will also follow the same aesthetic design principals as the downtown improvements. This intersection redesign will comply with complete streets principals.

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.

Storm Drain Capacity Improvements

The March 2002 Stormwater Master Plan identified several 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. 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.

Concord Street and Burnside Road or Other Prioritized Projects (\$83,000)

Construct a new drain that will be connected to the recently extended Greendale Avenue drain project to provide capacity for stormwater. This request is for the design phase of this project. The construction funding will be requested in FY2022.

Brooks and Culverts

There are aging draining infrastructures that require repair including 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 usable 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) has finalized stronger requirements for stormwater and permitting under the National Pollution Discharge Elimination System (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

Capital Improvement Plan
January 2020

Capital Project Request

Project Title: Public Works Infrastructure Program
(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.

Fiscal Year: 2021

Rosemary Brook (\$200,000)

The section of the brook being addressed has sediment, vegetation, and eroded banks that cause flow capacity and water quality issues. Remove sediment and vegetation and repair and/or replace failing walls.

Guardrail

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

Funding will be used on the above mentioned projects, unless extraordinary circumstances require work in the following areas: street resurfacing, roadway reconstruction, sidewalk repairs, intersection improvements, bridge repairs, storm drain capacity improvements, storm drain system repairs, brooks and culverts, and guardrail improvements.

Changes from Prior Year Submission

There is no financial increase from the prior year submission. Funding from drainage was reappropriated to the intersection improvement project, as that intersection requires significant drainage improvements.

Clarification of Questions

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

6. This is a DPW request.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Public Works Infrastructure Program				Fiscal Year: 2022			
Request Type:	Construction	Classification:	Infrastructure	Primary Purpose:	Transportation Network	Status:	Existing Project
Department:	PW Highway			Useful Life:	More than 15 Years	Project Cost:	\$2,203,000
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						Yes	
4. If 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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Yes	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						Yes	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		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. This program consists of multiple categories, each with their own sub-projects. This request is submitted each year, with different projects. (Continue to next page)			
Planning/Feasibility							
Design/Engineering		\$150,000					
Land/ROW Acquisition							
Site Preparation							
Construction		\$2,053,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$2,203,000					

Capital Project Request			
Project Title:	Public Works Infrastructure Program	Fiscal Year:	2022

Supplemental Information

Project Description and Considerations Continued

Street Resurfacing (\$990,000)

The Town has 279 lane miles of accepted road that require maintenance. The average lifecycle of a road is 15 to 20 years. Specialized surface treatments can be applied within this period to sustain or extend the lifecycle of the roadway based on usage. The Town targets 17 lane miles of road per year in order to resurface roads before they reach the end of their lifecycle. These roads are prioritized based on a pavement condition index (PCI). The Town targets roads with a PCI of under 70 for resurfacing and specialized treatment, under 60 for repair and renovation.

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. Installing a monolithic asphalt berm curb and/or granite curbing better defines the edge of the road, improves drainage, and protects the shoulder from erosion. The cost per lane mile for resurfacing in FY20 is \$86,000 or more per lane mile. A basic asphalt overlay at 1.5 inches with asphalt berm curb and casting adjustments is \$67,000 per lane mile. The cost of micro surfacing treatments and rubber chip seal surfacing treatments are approximately \$5 per square yard.

Roadway Reconstruction (\$150,000)

The Town has 279 lane miles of accepted road that require maintenance. Road resurfacing may be the appropriate treatment to extend the useful life of a road, but conditions may require that a total reconstruction of the road is necessary to address structural issues within the road including drainage, grade, and subsurface material construction. 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. The physical condition of the road to be evaluated for improvement includes shape, foundation, and traffic volume. The roads being addressed are deficient in one or more of the areas listed. 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.

Sidewalk Program (\$540,000)

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 Town conducted a study to create a sidewalk condition index. The conclusions of that study identified 80 miles of sidewalk in a condition that would warrant reconstruction. 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. FY20210 contract pricing to reconstruct one mile of asphalt sidewalk with incidental costs is estimated to be \$269,280 per mile (\$51.00/lf). Contract pricing to install a mile of granite curb with minor drainage improvements and incidental costs is estimated to be \$300,960 per mile (\$57.00/lf). These costs do not include engineering, design, tree removal and replacement, major drainage improvements, or major public or private property adjustments.

Capital Project Request			
Project Title:	Public Works Infrastructure Program	Fiscal Year:	2022
Intersection Improvements			
Traffic signals, intersections, and signage require upgrades and reevaluation as infrastructure ages, technology improves, and methods of transportation change. The Engineering Division reviews intersections based on requests identified need from the Highway Division, and traffic patterns and infrastructure changes that put pressure on various intersections throughout Town.			
Highland Avenue at West Street (\$650,000)			
At this intersection there is aging traffic control infrastructure, with reliability issues. Traffic control signals have been damaged by several car accidents. The traffic control signals only have one timer, which allows for only one traffic pattern regardless of the time of day. This does not allow for the efficient flow of traffic for the intersection. This area is also less aesthetically pleasing.			
This work will include installing a new traffic signal system with modern technology that will better control the flow of traffic through the intersection, reducing back-ups of traffic. It will also follow the same aesthetic design principals as the downtown improvements. This intersection redesign will comply with complete streets principals.			
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.			
Storm Drain Capacity Improvements			
The March 2002 Stormwater Master Plan identified several 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. 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.			
Concord Street and Burnside Road or Other Prioritized Projects (\$523,000)			
Construct a new drain that will be connected to the recently extended Greendale Avenue drain project to provide capacity for stormwater. This request is for the construction phase of this project. The funding for the design phase was requested in FY2021.			
Brooks and Culverts			
There are aging draining infrastructures that require repair including 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 usable 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) has finalized stronger requirements for stormwater and permitting under the National Pollution Discharge Elimination System			

Capital Improvement Plan
January 2020

Capital Project Request

Project Title: Public Works Infrastructure Program

Fiscal Year: 2022

(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.

Guardrail

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

Funding will be used on the above mentioned projects, unless extraordinary circumstances require work in the following areas: street resurfacing, roadway reconstruction, sidewalk repairs, intersection improvements, bridge repairs, storm drain capacity improvements, storm drain system repairs, brooks and culverts, and guardrail improvements.

Changes from Prior Year Submission

Storm Drain System Repairs have been pushed back until FY2024.

Clarification of Questions

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

6. This is a DPW request.

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

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Public Works Infrastructure Program				Fiscal Year: 2023			
Request Type:	Construction	Classification:	Infrastructure	Primary Purpose:	Transportation Network	Status:	Existing Project
Department:	PW Highway			Useful Life:	More than 15 Years	Project Cost:	\$3,504,500
How was the Project Cost Determined:		In-House Estimate		Budget Impact:		Negligible impact on the annual operating expenses less than \$5,000	
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						Yes	
4. If 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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Yes	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						Yes	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		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. This program consists of multiple categories, each with their own sub-projects. This request is submitted each year, with different projects. (Continue to next page)			
Planning/Feasibility							
Design/Engineering		\$269,500					
Land/ROW Acquisition							
Site Preparation							
Construction		\$3,235,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$3,504,500					

Capital Project Request

Project Title: Public Works Infrastructure Program

Fiscal Year: 2023

Supplemental Information

Project Description and Considerations Continued

Street Resurfacing (\$1,025,000)

The Town has 279 lane miles of accepted road that require maintenance. The average lifecycle of a road is 15 to 20 years. Specialized surface treatments can be applied within this period to sustain or extend the lifecycle of the roadway based on usage. The Town targets 17 lane miles of road per year in order to resurface roads before they reach the end of their lifecycle. These roads are prioritized based on a pavement condition index (PCI). The Town targets roads with a PCI of under 70 for resurfacing and specialized treatment, under 60 for repair and renovation.

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. Installing a monolithic asphalt berm curb and/or granite curbing better defines the edge of the road, improves drainage, and protects the shoulder from erosion. The cost per lane mile for resurfacing in FY20 is \$86,000 or more per lane mile. A basic asphalt overlay at 1.5 inches with asphalt berm curb and casting adjustments is \$67,000 per lane mile. The cost of micro surfacing treatments and rubber chip seal surfacing treatments are approximately \$5 per square yard.

Roadway Reconstruction (\$1,500,000)

The Town has 279 lane miles of accepted road that require maintenance. Road resurfacing may be the appropriate treatment to extend the useful life of a road, but conditions may require that a total reconstruction of the road is necessary to address structural issues within the road including drainage, grade, and subsurface material construction. This differs from the road rehabilitation program, as it requires more complete design and construction. Rehabilitation is like 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. The physical condition of the road to be evaluated for improvement includes shape, foundation, and traffic volume. The roads being addressed are deficient in one or more of the areas listed. 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. This request is for the construction phase of the project. The funding for the design phase was requested in FY2022.

Marked Tree Rd.

The road condition is very poor due to age and utility work. The electric and gas work has been completed in recent years. The Town is finishing up a capital improvement project in this roadway for the water system. This road has asphalt curbing that is past its useful life and is falling apart. The private properties that are connected to the road have some topographical challenges where there is a pitch to the driveways that is not ideal. There are site distance concerns due to the structure of the road. The road is only 20 feet wide. It is used as a cut-through road.

Capital Project Request

Project Title: Public Works Infrastructure Program
due to the curvature of the road. The road is only 20 feet wide. It is used as a cut-through road.

Fiscal Year: 2023

The work will widen the road, improve sidewalk width, install granite curbing, and make grading adjustments to lower road height for better access to private properties and provide better drainage. Reconstruction work will follow complete streets principals.

Sidewalk Program (\$555,000)

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 Town conducted a study to create a sidewalk condition index. The conclusions of that study identified 80 miles of sidewalk in a condition that would warrant reconstruction. 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. FY20210 contract pricing to reconstruct one mile of asphalt sidewalk with incidental costs is estimated to be \$269,280 per mile (\$51.00/lf). Contract pricing to install a mile of granite curb with minor drainage improvements and incidental costs is estimated to be \$300,960 per mile (\$57.00/lf). These costs do not include engineering, design, tree removal and replacement, major drainage improvements, or major public or private property adjustments.

Intersection Improvements

Traffic signals, intersections, and signage require upgrades and reevaluation as infrastructure ages, technology improves, and methods of transportation change. The Engineering Division reviews intersections based on requests identified need from the Highway Division, and traffic patterns and infrastructure changes that put pressure on various intersections throughout Town.

Central Avenue at Great Plain Avenue (\$166,000)

There have been struggles with bringing appropriate traffic flow through the intersection since it was constructed in the 1990s due to property size limitations. There is a historic property on one corner that limits the design. The existing intersection design does not provide the ideal traffic patterns for multiple modes of transportation.

This project will include geometric improvements and replacement/improvement of the traffic signal system. Installing a new traffic signal system that will include modern technology will better control the flow of traffic through the intersection, reducing back-ups of traffic. The layout of the intersection will be improved to increase traffic flow. This intersection redesign will comply with complete streets principals.

Bridge Repairs

Capital Project Request

Project Title: Public Works Infrastructure Program

Fiscal Year: 2023

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.

Storm Drain Capacity Improvements (\$103,500)

The March 2002 Stormwater Master Plan identified several 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. 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.

Brooks and Culverts

There are aging draining infrastructures that require repair including 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 usable 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) has finalized stronger requirements for stormwater and permitting under the National Pollution Discharge Elimination System (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.

Guardrail

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

Central Ave (\$155,000)

The decorative guardrail that was installed over 40 years ago is not code compliant. The current guardrail does not meet state guidelines. This will replace the existing guardrail with a replacement option that will be selected which will be aesthetically pleasing, compliant, and safe.

Funding will be used on the above mentioned projects, unless extraordinary circumstances require work in the following areas: street resurfacing, roadway reconstruction, sidewalk repairs, intersection improvements, bridge repairs, storm drain capacity improvements, storm drain system repairs, brooks and culverts, and guardrail improvements.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Public Works Infrastructure Program				Fiscal Year: 2024			
Request Type:	Construction	Classification:	Infrastructure	Primary Purpose:	Transportation Network	Status:	Existing Project
Department:	PW Highway			Useful Life:	More than 15 Years	Project Cost:	\$3,315,000
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						Yes	
4. If 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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Yes	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						Yes	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		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. This program consists of multiple categories, each with their own sub-projects. This request is submitted each year, with different projects. (Continue to next page)			
Planning/Feasibility							
Design/Engineering		\$200,000					
Land/ROW Acquisition							
Site Preparation							
Construction		\$3,115,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$3,315,000					

Capital Improvement Plan
January 2020

Capital Project Request

Project Title: Public Works Infrastructure Program

Fiscal Year: 2024

Supplemental Information

Project Description and Considerations Continued

Street Resurfacing (\$1,060,000)

The Town has 279 lane miles of accepted road that require maintenance. The average lifecycle of a road is 15 to 20 years. Specialized surface treatments can be applied within this period to sustain or extend the lifecycle of the roadway based on usage. The Town targets 17 lane miles of road per year in order to resurface roads before they reach the end of their lifecycle. These roads are prioritized based on a pavement condition index (PCI). The Town targets roads with a PCI of under 70 for resurfacing and specialized treatment, under 60 for repair and renovation.

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. Installing a monolithic asphalt berm curb and/or granite curbing better defines the edge of the road, improves drainage, and protects the shoulder from erosion. The cost per lane mile for resurfacing in FY20 is \$86,000 or more per lane mile. A basic asphalt overlay at 1.5 inches with asphalt berm curb and casting adjustments is \$67,000 per lane mile. The cost of micro surfacing treatments and rubber chip seal surfacing treatments are approximately \$5 per square yard.

Roadway Reconstruction

The Town has 279 lane miles of accepted road that require maintenance. Road resurfacing may be the appropriate treatment to extend the useful life of a road, but conditions may require that a total reconstruction of the road is necessary to address structural issues within the road including drainage, grade, and subsurface material construction. 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. The physical condition of the road to be evaluated for improvement includes shape, foundation, and traffic volume. The roads being addressed are deficient in one or more of the areas listed. 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.

Sidewalk Program (\$570,000)

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 Town conducted a study to create a sidewalk condition index. The conclusions of that study identified 80 miles of sidewalk in a condition that would warrant reconstruction. 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. FY2020 contract pricing to reconstruct one mile of asphalt sidewalk with incidental costs is estimated to be \$269,280 per mile (\$51.00/lf). Contract pricing to install a mile of granite curb with minor drainage improvements and incidental costs is estimated to be \$300,960 per mile (\$57.00/lf). These costs do not include engineering, design, tree removal and replacement, major drainage improvements, or major public or private property adjustments.

Capital Project Request

Project Title: Public Works Infrastructure Program

Fiscal Year: 2024

Intersection Improvements

Traffic signals, intersections, and signage require upgrades and reevaluation as infrastructure ages, technology improves, and methods of transportation change. The Engineering Division reviews intersections based on requests identified need from the Highway Division, and traffic patterns and infrastructure changes that put pressure on various intersections throughout Town.

Central Avenue at Great Plain Avenue (\$1,200,000)

There have been struggles with bringing appropriate traffic flow through the intersection since it was constructed in the 1990s due to property size limitations. There is a historic property on one corner that limits the design. The existing intersection design does not provide the ideal traffic patterns for multiple modes of transportation.

This project will include geometric improvements and replacement/improvement of the traffic signal system. Installing a new traffic signal system that will include modern technology will better control the flow of traffic through the intersection, reducing back-ups of traffic. The layout of the intersection will be improved to increase traffic flow. This intersection redesign will comply with complete streets principals. This request is for the construction phase of this project. Funding for the design phase was requested in FY2023.

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.

Storm Drain System Repairs (\$75,000)

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 for the Drains Division to address small projects related to the Labor Day 2013 storm drainage remediation.

Brooks and Culverts

There are aging draining infrastructures that require repair including 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 usable 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) has finalized stronger requirements for stormwater and permitting under the National Pollution Discharge Elimination System (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.

Capital Improvement Plan
January 2020

Capital Project Request

Project Title: Public Works Infrastructure Program
Funds from the EPA.

Fiscal Year: 2024

Alder Brook (\$200,000)

This is a category 5 impaired water body under NDPS. Category 5 is worst rating a water body can receive from the EPA. It required cleaning that will remove the phosphorus contaminated sediment and improve water quality. Remove sediment and vegetation, and repair/replace failing walls/culverts.

Guardrail (\$210,000)

Many of the Town's guardrails are noncompliant and DPW is preparing a plan internally to systematically upgrade existing guardrails to make them both compliant and aesthetically pleasing. This request is to replace guardrail on Dedham Avenue.

Funding will be used on the above mentioned projects, unless extraordinary circumstances require work in the following areas: street resurfacing, roadway reconstruction, sidewalk repairs, intersection improvements, bridge repairs, storm drain capacity improvements, storm drain system repairs, brooks and culverts, and guardrail improvements.

Updates from Prior Year Submission

Additional guardrail repairs have been added from last year's submission to continue to address the guardrail concerns throughout Town.

Clarification of Questions

3. Conservation Commission permitting may be required for drainage repairs, brooks and culvert repair, and roadway reconstruction.
6. This is a DPW request.
18. A potential increase in electrical costs from traffic signals may require additional budget funds from the Needham Electric Light and Gas Program.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Public Works Infrastructure Program				Fiscal Year: 2025			
Request Type:	Construction	Classification:	Infrastructure	Primary Purpose:	Transportation Network	Status:	Existing Project
Department:	PW Highway			Useful Life:	More than 15 Years	Project Cost:	\$3,105,000
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						Yes	
4. If 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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Yes	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						Yes	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		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. This program consists of multiple categories, each with their own sub-projects. This request is submitted each year, with different projects. (Continue to next page)			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction		\$2,030,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$2,030,000					

Capital Project Request			
Project Title:	Public Works Infrastructure Program	Fiscal Year:	2025

Supplemental Information

Project Description and Considerations Continued

Street Resurfacing (\$1,100,000)

The Town has 279 lane miles of accepted road that require maintenance. The average lifecycle of a road is 15 to 20 years. Specialized surface treatments can be applied within this period to sustain or extend the lifecycle of the roadway based on usage. The Town targets 17 lane miles of road per year in order to resurface roads before they reach the end of their lifecycle. These roads are prioritized based on a pavement condition index (PCI). The Town targets roads with a PCI of under 70 for resurfacing and specialized treatment, under 60 for repair and renovation.

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. Installing a monolithic asphalt berm curb and/or granite curbing better defines the edge of the road, improves drainage, and protects the shoulder from erosion. The cost per lane mile for resurfacing in FY20 is \$86,000 or more per lane mile. A basic asphalt overlay at 1.5 inches with asphalt berm curb and casting adjustments is \$67,000 per lane mile. The cost of micro surfacing treatments and rubber chip seal surfacing treatments are approximately \$5 per square yard.

Roadway Reconstruction

The Town has 279 lane miles of accepted road that require maintenance. Road resurfacing may be the appropriate treatment to extend the useful life of a road, but conditions may require that a total reconstruction of the road is necessary to address structural issues within the road including drainage, grade, and subsurface material construction. 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. The physical condition of the road to be evaluated for improvement includes shape, foundation, and traffic volume. The roads being addressed are deficient in one or more of the areas listed. 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.

Sidewalk Program (\$585,000)

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 Town conducted a study to create a sidewalk condition index. The conclusions of that study identified 80 miles of sidewalk in a condition that would warrant reconstruction. 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. FY2020 contract pricing to reconstruct one mile of asphalt sidewalk with incidental costs is estimated to be \$269,280 per mile (\$51.00/lf). Contract pricing to install a mile of granite curb with minor drainage improvements and incidental costs is estimated to be \$300,960 per mile (\$57.00/lf). These costs do not include engineering, design, tree removal and replacement, major drainage improvements, or major public or private property adjustments.

Capital Project Request			
Project Title:	Public Works Infrastructure Program	Fiscal Year:	2025
Intersection Improvements Traffic signals, intersections, and signage require upgrades and reevaluation as infrastructure ages, technology improves, and methods of transportation change. The Engineering Division reviews intersections based on requests identified need from the Highway Division, and traffic patterns and infrastructure changes that put pressure on various intersections throughout Town. 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. Storm Drain Capacity Improvements The March 2002 Stormwater Master Plan identified several 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. 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. Storm Drain System Repairs Labor Day 2013 Storm Drain System Repairs (\$75,000) 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 for the Drains Division to address small projects related to the Labor Day 2013 storm drainage remediation. 470 South Street (\$270,000) This program will also repair the storm drain system at 470 South Street. Brooks and Culverts There are aging draining infrastructures that require repair including 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 usable 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) has finalized stronger requirements for stormwater and permitting under the National Pollution Discharge Elimination System (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			

Capital Project Request			
Project Title:	Public Works Infrastructure Program	Fiscal Year:	2025
finances from the EPA. Guardrail Many of the Town's guardrails are noncompliant and DPW is preparing a plan internally to systematically upgrade existing guardrails to make them both compliant and aesthetically pleasing. Funding will be used on the above mentioned projects, unless extraordinary circumstances require work in the following areas: street resurfacing, roadway reconstruction, sidewalk repairs, intersection improvements, bridge repairs, storm drain capacity improvements, storm drain system repairs, brooks and culverts, and guardrail improvements. <u>Clarification of Questions</u> 3. Conservation Commission permitting may be required for drainage repairs, brooks and culvert repair, and roadway reconstruction. 6. This is a DPW request. 18. A potential increase in electrical costs from traffic signals may require additional budget funds from the Needham Electric Light and Gas Program.			

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: ASA Small Field Renovation					Fiscal Year: 2024		
Request Type:	Design/Engineering	Classification:	Infrastructure	Primary Purpose:	Culture and Leisure	Status:	Informational Only
Department:	PW Parks and Forestry			Useful Life:	More than 20 Years	Project Cost:	\$0
How was the Project Cost Determined:		No Estimate Has Been Determined		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?							No
3. Does this project require any permitting by any Town or State agency?							Yes
4. If 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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							Yes
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							Yes
12. Is this a request in response to a Court, Federal, or State order?							No
13. Is this a request in response to a documented public health or safety condition?							No
14. Is this a request to improve or make repairs to extend the useful life of a building?							No
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							No
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No
17. Will any other department be required to provide assistance in order to complete the project?							No
18. If funded, will this project increase the operating expense for any other department?							No
19. If funded, will additional permanent staff be required?							No
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		Project Summary This project will address the field deficiencies on the Asa Small ball diamond at the DeFazio complex that were not included in the scope of work for the Field of Dreams project. This has been on the Little League priority list for several years. The Town recently completed a minor infield renovation. The Town will hire a contractor to strip the existing turf, regrade the field, amend soils, replace the baseball skin surface, and install a new irrigation system. This project may include additional amenities such as field lights, a score board, bleachers, and a larger batting cage that will be funded by user groups. The Parks & Forestry Division will work with the user groups to identify any value added items.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$0					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	ASA Small Field Renovation	Fiscal Year:	2024

Supplemental Information

Changes from Prior Year Submission

The Parks & Forestry Division changed the status of this request to informational and pushed it to FY24 because Little League is undergoing a restructuring in leadership and the priority of projects may change as a result.

Clarification of Questions

- 3. This project may require permitting from the Conservation Commission, Planning Board, Zoning Board of Appeals, and Building Department.
- 6. This is a DPW request.
- 11. This project may be eligible for Community Preservation funds under Recreation.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Athletic Facility Improvements						Fiscal Year: 2021	
Request Type:	Construction	Classification:	Infrastructure	Primary Purpose:	Culture and Leisure	Status:	Existing-Revised Project
Department:	PW Parks and Forestry			Useful Life:	More than 15 Years	Project Cost:	\$261,500
How was the Project Cost Determined:		Hired Consultant		Budget Impact:		Negligible impact on the annual operating expenses less than \$5,000	
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						Yes	
4. If 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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Yes	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						Yes	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						Yes	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		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. In FY2021, the DPW is requesting funding for the design of the renovation of the Claxton Field lights and softball skins and funding for upgrades to the synthetic track at DeFazio.			
Planning/Feasibility							
Design/Engineering		\$101,500					
Land/ROW Acquisition							
Site Preparation							
Construction		\$160,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$261,500					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Athletic Facility Improvements	Fiscal Year:	2021

Supplemental Information

Project Summaries

Claxton Field Lights and Skin Renovation: Design

These two projects are being combined into one as they are in the same location and this will help make coordination between the two components smoother. This is the funding request for the design component of the project. The funding for the construction costs will come in FY2022.

Field Lighting (\$72,500)

The field currently has metal halide field lights that require increasing maintenance as they age. Metal halide is one of the least efficient lighting types currently available, the bulbs have a short life span that require frequent replacements, and they light an area as opposed to a focused directional light. This project will address upgrading the field lighting system to more energy efficient lights. The project will evaluate the lighting needs of the field and make recommendations for improvement. The construction of these lights will be done in the fall season to prepare for the following spring softball season.

Softball Skin Renovation Fields 1 & 2 (\$29,000)

Softball fields have the entire infield as clay skin, unlike baseball diamonds which is a combination of skin and turf; this makes the grading of the skins very important as any imperfections will cause puddling. The current fields were constructed on a closed landfill that was not properly graded due to site conditions, settling of materials, and age. After heavy rains, there is puddling on the skin which can lead to frequent field closures.

This project will remove the existing skin clay material, evaluate the conditions below the skin, and make amendments and regrade as necessary. Proper drainage materials and systems will be brought in, laser graded, and clay skins will be replaced.

Synthetic Track at DeFazio (\$160,000)

The Parks and Forestry Superintendent and a consultant evaluated the synthetic track at DeFazio and determined there was delamination. The track is presently under a fifteen year warranty that will be expiring within the next five years. Basic maintenance, including this work, will be required to ensure that at the end of the warranty, a total replacement isn't necessary. This request is to resurface the synthetic track.

Changes from Prior Year Submission

Claxton lighting and softball skin renovation was combined into one project and the design was pushed to FY2021. Increase in costs due to an updated quote and inflation.

McCloud Field Renovation was pushed back to FY2022.

The synthetic track resurfacing at DeFazio was added to FY2021.

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Athletic Facility Improvements	Fiscal Year:	2021
<u>Future Projects</u>			
McCloud Field Renovation (FY2022 and FY2023)			
Broadmeadow & Eliot Fields Renovation (FY2023, FY2024, FY2025)			
Various Fencing Improvements (FY2024)			
Needham Heights Common Renovation - design of sidewalks, irrigation, landscape improvements, hardscape, electrical and lighting, park benches			
DeFazio Complex - install walking path with protective netting to DeFazio #1			
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			
Tennis Court Renovations			
High Rock Field Resurfacing and Fencing			
Memorial Park sand injection			
<u>Clarification of Questions</u>			
3. Conservation Commission permitting and Planning Board filing may be required.			
6. This is a DPW request.			
11. All items except for Turf Fields are eligible for Community Preservation Funds.			
17. The Department of Public Works will be partnering with Park and Recreation.			

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Athletic Facility Improvements						Fiscal Year: 2022	
Request Type:	Construction	Classification:	Infrastructure	Primary Purpose:	Culture and Leisure	Status:	Existing-Revised Project
Department:	PW Parks and Forestry			Useful Life:	More than 15 Years	Project Cost:	\$1,019,000
How was the Project Cost Determined:		Hired Consultant		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						Yes	
4. If 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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Yes	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						Yes	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						Yes	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		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. In FY2022, the DPW is requesting funding for the construction component of Claxton Field Lights and Skin Renovation and the design funding for McCloud Field Renovation.			
Planning/Feasibility							
Design/Engineering		\$45,000					
Land/ROW Acquisition							
Site Preparation							
Construction		\$974,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$1,019,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Athletic Facility Improvements	Fiscal Year:	2022

Supplemental Information

Project Summaries

Claxton Field Lights and Skin Renovation: Construction

These two projects are being combined into one as they are in the same location and this will help make coordination between the two components smoother. This is the funding request for the construction costs of this project. The design was previously funded in FY2021.

Field Lighting (\$732,000)

The field currently has metal halide field lights that require increasing maintenance as they age. Metal halide is one of the least efficient lighting types currently available, the bulbs have a short life span that require frequent replacements, and they light an area as opposed to a focused directional light.

This project will address upgrading the field lighting system to more energy efficient lights. The project will evaluate the lighting needs of the field and make recommendations for improvement. The construction of these lights will be done in the fall season to prepare for the following spring softball season.

Softball Skin Renovation Fields 1 & 2 (\$242,000)

Softball fields have the entire infield as clay skin, unlike baseball diamonds which is a combination of skin and turf; this makes the grading of the skins very important as any imperfections will cause puddling. The current fields were constructed on a closed landfill that was not properly graded due to site conditions, settling of materials, and age. After heavy rains, there is puddling on the skin which can lead to frequent field closures.

This project will remove the existing skin clay material, evaluate the conditions below the skin, and make amendments and regrade as necessary. Proper drainage materials and systems will be brought in, laser graded, and clay skins will be replaced.

McCloud Field Renovation: Design (\$45,000)

Since the field was renovated in 2009, there has been several drainage issues related to the 4' drain pipe that runs through the field. This has caused sink holes that require emergency repair for the field to be safely used. These sink holes appear after large rain events that wash out the materials from underneath the field.

Currently there are several methodologies that vary in terms of invasiveness and cost to address this issue that will be vetted out in design. This will address both the 4' drain and the subsurface of the field that has been eroded by storm water events. The budget proposed is for one of the more invasive approaches to ensure there is sufficient funding to return the field to operation. This funding is for the design component of this project. The construction funding will be requested in FY2023.

Changes from Prior Year Submission

Increase in cost for Claxton Field is due to an updated quote. McCloud Field Renovation was pushed back to FY2022.

Capital Improvement Plan
January 2020

Capital Project Request

Project Title: Athletic Facility Improvements

Fiscal Year: 2022

Future Projects

Broadmeadow & Eliot Fields Renovation (FY2023, FY2024, FY2025)

Various Fencing Improvements (FY2024)

Needham Heights Common Renovation - design of sidewalks, irrigation, landscape improvements, hardscape, electrical and lighting, park benches

DeFazio Complex - install walking path with protective netting to DeFazio #1

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

Tennis Court Renovations

High Rock Field Resurfacing and Fencing

Memorial Park sand injection

Clarification of Questions

3. Conservation Commission permitting and Planning Board filing may be required.

6. This is a DPW request.

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

17. The Department of Public Works will be partnering with Park and Recreation.

Capital Improvement Plan
January 2020

Capital Project Request								
Project Title:		Athletic Facility Improvements				Fiscal Year:		2023
Request Type:	Construction	Classification:	Infrastructure	Primary Purpose:	Culture and Leisure	Status:	Existing-Revised Project	
Department:	PW Parks and Forestry			Useful Life:	More than 15 Years	Project Cost:	\$557,000	
How was the Project Cost Determined:		Hired Consultant		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000			
Parameters						Response		
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?							No	
3. Does this project require any permitting by any Town or State agency?							Yes	
4. If 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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							Yes	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							Yes	
12. Is this a request in response to a Court, Federal, or State order?							No	
13. Is this a request in response to a documented public health or safety condition?							No	
14. Is this a request to improve or make repairs to extend the useful life of a building?							No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No	
17. Will any other department be required to provide assistance in order to complete the project?							Yes	
18. If funded, will this project increase the operating expense for any other department?							No	
19. If funded, will additional permanent staff be required?							No	
Total New FTE's:		0	Project Description and Considerations					
Project Budget Elements		Project Budget		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. In FY2023, the DPW is requesting funding for the construction component of McCloud Field Renovation and the design funding for Broadmeadow and Eliot Fields Renovation.				
Planning/Feasibility								
Design/Engineering		\$107,000						
Land/ROW Acquisition								
Site Preparation								
Construction		\$450,000						
Construction Management								
Equipment								
Furniture, Fixtures, and Equipment								
Technology								
Other Expenses								
TOTAL		\$557,000						

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Athletic Facility Improvements	Fiscal Year:	2023

Supplemental Information

Project Summaries

McCloud Field Renovation: Construction (\$450,000)

Since the field was renovated in 2009, there has been several drainage issues related to the 4' drain pipe that runs through the field. This has caused sink holes that require emergency repair for the field to be safely used. These sink holes appear after large rain events that wash out the materials from underneath the field.

Currently there are several methodologies that vary in terms of invasiveness and cost to address this issue that will be vetted out in design. This will address both the 4' drain and the subsurface of the field that has been eroded by storm water events. The budget proposed is for one of the more invasive approaches to ensure there is sufficient funding to return the field to operation. The funding requested is for the construction component of this project. The design was funded in FY2022.

Broadmeadow & Eliot Fields Renovation: Design (\$107,000)

Both the Broadmeadow and Eliot School fields are showing signs of age due to inappropriate subsurface materials which impact the health of the turf and have made it difficult to provide a suitable playing surface at these fields. Additionally, this problem at the Broadmeadow is exacerbated by the physical location that has surface drainage from neighboring areas draining into the field.

At the Broadmeadow, all existing turf will be stripped and the top soil will be removed and stored on site. The whole site will be sub-graded and the top soil will be placed back on site and amended in place with sand, then blended for improved drainage. The site will then be laser graded to ensure that water slopes off the surface, and then sod will be laid. At the Broadmeadow, there may be additional storm water capturing systems to be designed to alleviate the excessive flooding problem. These will be vetted out during the design process.

At the Eliot, the design will include a transition to a synthetic field. It has been a struggle to maintain consistent ground cover of natural turf grass. Due to the smaller size of the Eliot field and the number of students regularly outside on the field, a synthetic field is a better option to maintain a consistent field covering.

The funding being requested is for the design of both fields. The construction funding for the Eliot will be requested in FY2024 and the construction funding for the Broadmeadow will be requested in FY2025.

Changes from Prior Year Submission

McCloud Field Renovation construction was pushed back to FY2023.

Capital Improvement Plan
January 2020

Capital Project Request

Project Title: Athletic Facility Improvements

Fiscal Year: 2023

The construction funding for the Broadmeadow and Eliot has been split between FY2024 and FY2025.

Future Projects

Various Fencing Improvements (FY2024)

Needham Heights Common Renovation - design of sidewalks, irrigation, landscape improvements, hardscape, electrical and lighting, park benches

DeFazio Complex - install walking path with protective netting to DeFazio #1

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

Tennis Court Renovations

High Rock Field Resurfacing and Fencing

Memorial Park sand injection

Clarification of Questions

3. Conservation Commission permitting and Planning Board filing may be required.

6. This is a DPW request.

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

17. The Department of Public Works will be partnering with Park and Recreation.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Athletic Facility Improvements						Fiscal Year: 2024	
Request Type:	Construction	Classification:	Infrastructure	Primary Purpose:	Culture and Leisure	Status:	Existing-Revised Project
Department:	PW Parks and Forestry			Useful Life:	More than 15 Years	Project Cost:	\$841,000
How was the Project Cost Determined:		Hired Consultant		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						Yes	
4. If 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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Yes	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						Yes	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						Yes	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		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. In FY2024, the DPW is requesting funding for the construction component of Eliot Field Renovation and funding for various fencing improvements.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction		\$841,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$841,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Athletic Facility Improvements	Fiscal Year:	2024

Supplemental Information

Project Summaries

Broadmeadow & Eliot Fields Renovation: Construction (\$551,000)

Both the Broadmeadow and Eliot School fields are showing signs of age due to inappropriate subsurface materials which impact the health of the turf and have made it difficult to provide a suitable playing surface at these fields. Additionally, this problem at the Broadmeadow is exacerbated by the physical location that has surface drainage from neighboring areas draining into the field.

All existing turf will be stripped and the top soil will be removed and stored on site. The whole site will be sub-graded and the top soil will be placed back on site and amended in place with sand, then blended for improved drainage. The site will then be laser graded to ensure that water slopes off the surface, and then sod will be laid. At the Broadmeadow, there may be additional storm water capturing systems to be designed to alleviate the excessive flooding problem. These will be vetted out during the design process. This request is for the funding of the construction costs for the Eliot Field Renovation. The design for both fields was previously funded in FY2023. The funding for the Broadmeadow construction costs will be requested in FY2025.

Town-Wide Fencing Improvements (\$290,000)

DeFazio Tot Lot

The perimeter chain link fencing is showing age, including rust and damage. Improvements have been delayed on this fence due to the uncertain nature of the site. With the new Facilities Master Plan being completed, this facility is envisioned to be used well into the future and the fence should be replaced. The existing posts will be evaluated and those that are suitable will be reused. The chain link fabric will be disposed of and replaced in kind.

DeFazio Complex

Various fencing structures including perimeter fencing, backstops, and players benches are showing age and use. These fields are in very high use and receive the most wear and tear, which may cause the life cycle of the fencing and related structures to be shortened.

The existing posts will be evaluated and those that are suitable will be reused. The chain link fabric will be disposed of and replaced in kind.

Changes from Prior Year Submission

The construction funding for the Broadmeadow and Eliot has been split between FY2024 and FY2025.

Future Projects

Capital Improvement Plan
January 2020

Capital Project Request	
Project Title: Athletic Facility Improvements	Fiscal Year: 2024
<u>Future Projects</u> Needham Heights Common Renovation - design of sidewalks, irrigation, landscape improvements, hardscape, electrical and lighting, park benches DeFazio Complex - install walking path with protective netting to DeFazio #1 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 Tennis Court Renovations High Rock Field Resurfacing and Fencing Memorial Park sand injection <u>Clarification of Questions</u> 3. Conservation Commission permitting and Planning Board filing may be required. 6. This is a DPW request. 11. All items except for Turf Fields are eligible for Community Preservation Funds. 17. The Department of Public Works will be partnering with Park and Recreation.	

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Athletic Facility Improvements						Fiscal Year: 2025	
Request Type:	Construction	Classification:	Infrastructure	Primary Purpose:	Culture and Leisure	Status:	Existing-Revised Project
Department:	PW Parks and Forestry			Useful Life:	More than 15 Years	Project Cost:	\$551,000
How was the Project Cost Determined:		Hired Consultant		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						Yes	
4. If 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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Yes	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						Yes	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						Yes	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		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. In FY2025, the DPW is requesting funding for the construction phase of the Broadmeadow Field Renovation.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction		\$551,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$551,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Athletic Facility Improvements	Fiscal Year:	2025

Supplemental Information

Project Summaries

Broadmeadow & Eliot Fields Renovation: Construction (\$551,000)

Both the Broadmeadow and Eliot School fields are showing signs of age due to inappropriate subsurface materials which impact the health of the turf and have made it difficult to provide a suitable playing surface at these fields. Additionally, this problem at the Broadmeadow is exacerbated by the physical location that has surface drainage from neighboring areas draining into the field.

All existing turf will be stripped and the top soil will be removed and stored on site. The whole site will be sub-graded and the top soil will be placed back on site and amended in place with sand, then blended for improved drainage. The site will then be laser graded to ensure that water slopes off the surface, and then sod will be laid. At the Broadmeadow, there may be additional storm water capturing systems to be designed to alleviate the excessive flooding problem. These will be vetted out during the design process. This request is for the funding of the construction costs for the Broadmeadow Field Renovation. The design for both fields was previously funded in FY2023. The funding for the Eliot construction costs was requested in FY2024.

Changes from Prior Year Submission

The construction funding for the Broadmeadow and Eliot has been split between FY2024 and FY2025.

Future Projects

Needham Heights Common Renovation - design of sidewalks, irrigation, landscape improvements, hardscape, electrical and lighting, park benches

DeFazio Complex - install walking path with protective netting to DeFazio #1

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

Tennis Court Renovations

High Rock Field Resurfacing and Fencing

Memorial Park sand injection

Clarification of Questions

3. Conservation Commission permitting and Planning Board filing may be required.

6. This is a DPW request.

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

17. The Department of Public Works will be partnering with Park and Recreation.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Batting Cage Improvements						Fiscal Year: 2025	
Request Type:	Construction	Classification:	Infrastructure	Primary Purpose:	Culture and Leisure	Status:	Informational Only
Department:	PW Parks and Forestry			Useful Life:	More than 9 Years	Project Cost:	\$134,510
How was the Project Cost Determined:		Industry References		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?							No
3. Does this project require any permitting by any Town or State agency?							Yes
4. If 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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							Yes
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							No
12. Is this a request in response to a Court, Federal, or State order?							No
13. Is this a request in response to a documented public health or safety condition?							No
14. Is this a request to improve or make repairs to extend the useful life of a building?							No
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							Yes
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							Yes
17. Will any other department be required to provide assistance in order to complete the project?							No
18. If funded, will this project increase the operating expense for any other department?							No
19. If funded, will additional permanent staff be required?							No
Total New FTE's:		0	Project Description and Considerations				
Project Budget Elements		Project Budget		This project would look to improve several Town batting cages across Town that support the High School Athletics program as well as Youth and Adult sporting groups in Town. Some of the best pieces of synthetic turf were saved during the synthetic renovation during the summer of 2019. These saved carpet pieces would be used to provide a safer and more reliable ground surface as the foundation of our hitting cages located at: ASA Small, Memorial Field, Claxton Field, and Mills Field. Also included in this request is the desire to create a synthetic carpet area at the Needham Off leash dog park. This would offer reprieve from the wood chips for both patrons and dogs alike.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction		\$134,510					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$134,510					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Batting Cage Improvements	Fiscal Year:	2025

Supplemental Information

Clarification of Questions

- 3. Planning Board review may be required.
- 6. This is a DPW request.
- 15. The batting cages would be permanently installed.
- 16. This request is to improve fields.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Passive Recreation Improvements - Dwight Field/Charles River Center					Fiscal Year: 2022		
Request Type:	Design/Engineering	Classification:	Infrastructure	Primary Purpose:	Culture and Leisure	Status:	Existing Project
Department:	PW Parks and Forestry			Useful Life:	More than 20 Years	Project Cost:	\$37,500
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Yes	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						Yes	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		The Parks and Forestry Division and Charles River Center are presenting a plan to make substantial improvements to the Town-owned quarter acre passive recreation area behind the Charles River Center on Dwight Road, adjacent to the baseball diamond at Dwight Field. This area is frequently used by participants in Charles River Center programming and residents of Charles River properties. During baseball season, the park is used by families who have children participating in the baseball programs. This request is for the design phase of the project. The funding for the construction phase will be requested in FY2023.			
Planning/Feasibility							
Design/Engineering		\$37,500					
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$37,500					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Passive Recreation Improvements - Dwight Field/Charles River Center	Fiscal Year:	2022

Supplemental Information

Project Summary

This parcel is presently in disrepair and suffers from drainage issues. There are trees on site that are no longer viable, creating safety concerns, and the ground cover has been eroded by stormwater. This park does not have good accessibility due to the elevation and the park is presently accessed from the Charles River Center by several stairs.

This project will include removing the existing ground covering, regrading the site, making drainage improvements, installing new turf, removing and pruning problematic trees, planting new trees, creating an accessible entrance into the park areas, and other site amenities. Additionally, site furniture will be installed for passive recreation including picnic tables and benches, a small covered pavilion similar to what was installed at Greene's Field, and other small recreational equipment that can be used by children whose siblings are playing baseball. There will be a focus on low maintenance installations to reduce reoccurring costs. This will require some additional grass mowing, but it should take minimal time due to the connection to the field.

Changes from Prior Year Submission

The cost has increased due to inflation.

Clarification of Questions

6. This is a DPW request.
12. This should meet the eligibility requirements CPA funding under the recreational category.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Passive Recreation Improvements - Dwight Field/Charles River Center					Fiscal Year: 2023		
Request Type:	Construction	Classification:	Infrastructure	Primary Purpose:	Culture and Leisure	Status:	Existing Project
Department:	PW Parks and Forestry			Useful Life:	More than 20 Years	Project Cost:	\$375,000
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?							No
3. Does this project require any permitting by any Town or State agency?							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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							Yes
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							Yes
12. Is this a request in response to a Court, Federal, or State order?							No
13. Is this a request in response to a documented public health or safety condition?							No
14. Is this a request to improve or make repairs to extend the useful life of a building?							No
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							No
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No
17. Will any other department be required to provide assistance in order to complete the project?							No
18. If funded, will this project increase the operating expense for any other department?							No
19. If funded, will additional permanent staff be required?							No
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		The Parks and Forestry Division and Charles River Center are presenting a plan to make substantial improvements to the Town-owned quarter acre passive recreation area behind the Charles River Center on Dwight Road, adjacent to the baseball diamond at Dwight Field. This area is frequently used by participants in Charles River Center programming and residents of Charles River properties. During baseball season, the park is used by families who have children participating in the baseball programs. This request is for the construction phase of the project. The funding for the design phase was requested in FY2022.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction		\$375,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$375,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Passive Recreation Improvements - Dwight Field/Charles River Center	Fiscal Year:	2023

Supplemental Information

Project Summary

This parcel is presently in disrepair and suffers from drainage issues. There are trees on site that are no longer viable, creating safety concerns, and the ground cover has been eroded by stormwater. This park does not have good accessibility due to the elevation and the park is presently accessed from the Charles River Center by several stairs.

This project will include removing the existing ground covering, regrading the site, making drainage improvements, installing new turf, removing and pruning problematic trees, planting new trees, creating an accessible entrance into the park areas, and other site amenities. Additionally, site furniture will be installed for passive recreation including picnic tables and benches, a small covered pavilion similar to what was installed at Greene's Field, and other small recreational equipment that can be used by children whose siblings are playing baseball. There will be a focus on low maintenance installations to reduce reoccurring costs. This will require some additional grass mowing, but it should take minimal time due to the connection to the field.

Changes from Prior Year Submission

The cost has increased due to inflation.

Clarification of Questions

6. This is a DPW request.
12. This should meet the eligibility requirements CPA funding under the recreational category.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Town Common Historic Redesign and Beautification						Fiscal Year: 2022	
Request Type:	Construction	Classification:	Land	Primary Purpose:	Culture and Leisure	Status:	Existing Project
Department:	PW Parks and Forestry			Useful Life:	More than 15 Years	Project Cost:	\$938,000
How was the Project Cost Determined:		Hired Consultant		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							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?							Not Applicable
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							Yes
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							Yes
12. Is this a request in response to a Court, Federal, or State order?							No
13. Is this a request in response to a documented public health or safety condition?							No
14. Is this a request to improve or make repairs to extend the useful life of a building?							No
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							No
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No
17. Will any other department be required to provide assistance in order to complete the project?							Yes
18. If funded, will this project increase the operating expense for any other department?							No
19. If funded, will additional permanent staff be required?							No
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		The Town completed an internal design process for the Town Common and drafted a scope of service which includes improved hardscape, landscaping, amenities, tree plantings, and utility upgrades that are consistent with the historic nature of the Common and the new Downtown Streetscape Improvement Project. This project will install new sod, trees, plantings, low maintenance hardscape materials, and increase handicap accessibility. The pathways and landscaping will be adjusted to become more aesthetically pleasing and functionally enhanced. There will be increased electrical and sound capacity to accommodate Town-wide events.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction		\$938,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$938,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Town Common Historic Redesign and Beautification	Fiscal Year:	2022

Supplemental Information

This request is for the funding for the construction phase of this project. The design phase was funded in FY2020.

Changes from Prior Year Submission

The construction phase of this project has been pushed back to FY2022. The bid for the design is being released this fall. The increase in cost is due to inflation.

Clarification of Questions

1. This project required previous funding for the bid.
3. This project may be subject to Planning Board review.
4. ITC will need to be involved for Wi-Fi and electrical connectivity.
6. This is a DPW request.
11. This project is being evaluated for eligibility of Community Preservation Funds under the category of Historic Preservation.
17. The Town Manager's Office will be involved.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: RTS Employee Trailer						Fiscal Year: 2024	
Request Type:	Acquisition	Classification:	Building	Primary Purpose:	Other (see below for information)	Status:	Informational Only
Department:	PW Recycling & Solid Waste			Useful Life:	More than 20 Years	Project Cost:	\$0
How was the Project Cost Determined:		No Estimate Has Been Determined		Budget Impact:			
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?						Yes	
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Yes	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		<u>Project Summary</u> The current employee trailer is over 15 years old. It is in poor condition and does not meet the space needs of the staff. It has frequent issues with the heating and cooling systems, and the electrical system is substandard. It is not ADA compliant, nor does it have adequate storage space. There is only one small bath facility that does not have a shower. This project will include the installation of a new employee trailer in a more centrally located area of the facility and it shall be ADA accessible. The trailer will provide appropriate working conditions for all RTS staff, including shower facilities and laundry. The plumbing for this new employee trailer poses a significant cost in terms of reconfiguring the sewer at the RTS.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$0					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	RTS Employee Trailer	Fiscal Year:	2024

Supplemental Information

Clarification of Questions

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 cable television. The RTS will communicate with ITC in terms of technology needed in the new employee trailer.
5. The RTS will communicate with the Building Maintenance Division to discuss future cleaning service requirements.
6. This is a DPW request.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: RTS Property Improvements						Fiscal Year: 2022	
Request Type:	Construction	Classification:	Land	Primary Purpose:	Public Works	Status:	Existing Project
Department:	PW Recycling & Solid Waste			Useful Life:	More than 15 Years	Project Cost:	\$420,000
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						Yes	
4. If 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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Yes	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		This article will be used to fund improvements to the Recycling and Transfer Station (RTS) facility to increase efficiency, comply with regulatory requirements, and improve the facility function. In FY2022, the DPW is requesting funding to purchase coverage for the open top containers, to complete stormwater improvements to Area 2, and to purchase jersey barriers. Part of these stormwater improvements are already underway in other areas of the RTS.			
Planning/Feasibility							
Design/Engineering		\$20,000					
Land/ROW Acquisition							
Site Preparation							
Construction		\$400,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$420,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	RTS Property Improvements	Fiscal Year:	2022

Supplemental Information

Coverage for Open Top Containers (Design: \$20,000; Construction \$115,000)

The RTS uses 100-yard open top containers to haul trash and recyclables. During the winter, the loaded trailers are left outside and the loads of trash or recyclables inside the containers often freeze, making the trailers impossible to empty until the loads thaw.

Containers cannot be tarped in the event of snow due to safety concerns about having the snow shoveled by staff or the driver from the tarps if they were covering the load of trash or recyclables.

The plan is to purchase and install a fabric covered storage facility for four containers to prevent precipitation from accumulating. To minimize freezing of loads and to allow containers to be always covered when full, a 65' x 70' fabric covered steel skeletal structure would be built over the existing 2 concrete pads on which four 100-yard open top containers are parked

Stormwater Improvements Area 2 (\$285,000)

The 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. This project will assist the Town in complying with the 2016 NPDES MS4 Permit.

The plan is to grade and pave the existing dirt road behind the salt shed. This road is the main access to and from the salt shed for deliveries and loading. This work will stabilize the road, preventing drainage and runoff problems year round. The project will prevent erosion of soil into the wetlands adjacent to the RTS.

In 2014 the Town received a Negative Determination of Applicability from the Conservation Commission that required the separation of the composting operations from the wetlands. This request is to purchase 300 jersey barriers that will be used to create a barrier between the composting operation and the wetlands.

Changes from Prior Year Submission

Funding for the open top storage container covers and the stormwater improvements in area 2 were pushed back to FY2022. This is due to time constraints and the bidding and construction of other previously funded capital improvements. The Town is also completing an efficiency study that makes recommendations to the physical infrastructure and we are delaying projects until after the study is finalized. The costs have increased due to inflation.

Clarification of Questions

3. This project may be subject to Conservation Commission permitting requirements.
6. This is a DPW request.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: RTS Property Improvements						Fiscal Year: 2023	
Request Type:	Construction	Classification:	Infrastructure	Primary Purpose:	Public Works	Status:	Existing Project
Department:	PW Recycling & Solid Waste			Useful Life:	More than 15 Years	Project Cost:	\$124,500
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						Yes	
4. If 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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Yes	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						Yes	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		This article will be used to fund improvements to the Recycling and Transfer Station (RTS) facility to increase efficiency, comply with regulatory requirements, and improve the facility function. In FY2023, the DPW is requesting funding for the expansion of the scale. The extended scale will accurately determine the weights of materials being shipped out of or dropped off at the RTS. Presently, the Town uses approximate values for these materials. 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.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction		\$124,500					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$124,500					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	RTS Property Improvements	Fiscal Year:	2023

Supplemental Information

Clarification of Questions

3. This project may have to go to the Planning Board for Site Plan Review and may be subject to Conservation Commission permitting requirements. 6. This is a DPW request.

14. The scale is a below ground device and will be permanently installed at the RTS.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Cooks Bridge Sewer Pump Station Design					Fiscal Year: 2022		
Request Type:	Design/Engineering	Classification:	Infrastructure	Primary Purpose:	Wastewater Resources	Status:	Existing Project
Department:	Sewer Enterprise			Useful Life:	More than 20 Years	Project Cost:	\$345,000
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							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?							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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							Yes
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							No
12. Is this a request in response to a Court, Federal, or State order?							No
13. Is this a request in response to a documented public health or safety condition?							No
14. Is this a request to improve or make repairs to extend the useful life of a building?							No
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							No
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No
17. Will any other department be required to provide assistance in order to complete the project?							No
18. If funded, will this project increase the operating expense for any other department?							No
19. If funded, will additional permanent staff be required?							No
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		The pump station at this location is beyond its useful life and requires constant maintenance. The pumps are failing more frequently due to electrical or mechanical issues and require more personnel time and emergency funds to keep the station running. The capacity of the pump must be upgraded to handle the volume of sewage at this location. The controls on the existing pump station are located outside of the building. The plan is to replace the existing canister pump station with a new canister pump station. The controls on the replacement pump station will be relocated to inside the building. This request is for the design phase of the project. A funding request for the construction phase will be submitted in FY2023.			
Planning/Feasibility							
Design/Engineering		\$345,000					
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$345,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Cooks Bridge Sewer Pump Station Design	Fiscal Year:	2022

Supplemental Information

Clarification of Questions

1. After the design has been funded and completed, a request for construction will be necessary. Please refer to the separate submission for FY2023.
3. Conservation Commission permitting may be required for site work.
6. The Department of Public Works submitted this request.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Cooks Bridge Sewer Pump Station Construction						Fiscal Year: 2023	
Request Type:	Construction	Classification:	Infrastructure	Primary Purpose:	Wastewater Resources	Status:	Existing Project
Department:	Sewer Enterprise			Useful Life:	More than 20 Years	Project Cost:	\$3,404,205
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						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?						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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Yes	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		The pump station at this location is beyond its useful life and requires constant maintenance. The pumps are failing more frequently due to electrical or mechanical issues and require more personnel time and emergency funds to keep the station running. The capacity of the pump must be upgraded to handle the volume of sewage at this location. The controls on the existing pump station are located outside of the building. The plan is to replace the existing canister pump station with a new canister pump station. The controls on the replacement pump station will be relocated to inside the building			
Planning/Feasibility							
Design/Engineering		\$3,370,500					
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses		\$33,705					
TOTAL		\$3,404,205					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Cooks Bridge Sewer Pump Station Construction	Fiscal Year:	2023

Supplemental Information

Project Description and Considerations Continued

Other expenses is an allowance for debt issuance related expenses. The project funding is assumed to be debt.

Clarification of Questions

1. After the design has been funded and completed, a request for construction will be necessary. Please refer to the separate submission for design work for FY2022.
3. Conservation Commission permitting may be required for site work.
6. The Department of Public Works submitted this request.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Drain System Improvement						Fiscal Year: 2022	
Request Type:	Design/Engineering	Classification:	Infrastructure	Primary Purpose:	Wastewater Resources	Status:	Informational Only
Department:	Sewer Enterprise			Useful Life:	More than 20 Years	Project Cost:	\$262,000
How was the Project Cost Determined:		Hired Consultant		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						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?						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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Yes	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						Yes	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		The Town entered into a Memorandum of Understanding (MOU) with the Environmental Protection Agency (EPA) to commence a Town-wide investigation of stormwater discharge to address the pollutants through stormwater into the Charles River Basin and other water bodies. Incorporated into this plan are improvements to the Stormwater Drainage System to upgrade the quality of the water discharged into the Charles River in Town. This request is to support action items identified in the MOU. In 2003, the EPA National Pollutant Discharge Elimination System (NPDES) Stormwater Drainage Permit took effect. It incorporated several requirements identified in the existing Town's MOU. In April 2016, the second permit issued by the EPA was submitted and went into effect July 1, 2018. This article addresses some of the requirements for NPDES.			
Planning/Feasibility							
Design/Engineering		\$262,000					
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$262,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Drain System Improvement	Fiscal Year:	2022

Supplemental Information

The Town Reservoir Sediment Removal

The sediment at the bottom of the reservoir is contaminated and must be removed. This is a category 5 impaired water body under NDPES. Category 5 is worst rating a water body can receive from the EPA.

The Town will engage a designer to determine the best way to remove the sediment. This funding request is for the design phase of the project. The construction phase funding will be requested in FY2023.

Future Projects (prioritization pending analysis):

Walker Pond
Farley Pond
Forbes Pond
Sabrina Lake
Wildwood Pond
Sportsman's Pond

Changes from Prior Year Submission

This request has been pushed back to FY2022 due to the workload and capacity within Public Works. The Water and Sewer Division is currently under transition with management. The cost has been inflated.

Clarification of Questions

1. There are additional construction costs not included in this request. The costs are included in the FY2023 request.
3. Conservation Commission, State, and Federal permitting may be required for dredging.
6. This is a DPW request.
11. Yes, this is a project for which an Initial Eligibility Project Application may be filed with the Community Preservation Committee.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Drain System Improvement						Fiscal Year: 2023	
Request Type:	Construction	Classification:	Infrastructure	Primary Purpose:	Wastewater Resources	Status:	Informational Only
Department:	Sewer Enterprise			Useful Life:	More than 20 Years	Project Cost:	\$2,070,000
How was the Project Cost Determined:		Hired Consultant		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						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?						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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Yes	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						Yes	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		The Town entered into a Memorandum of Understanding (MOU) with the Environmental Protection Agency (EPA) to commence a Town-wide investigation of stormwater discharge to address the pollutants through stormwater into the Charles River Basin and other water bodies. Incorporated into this plan are improvements to the Stormwater Drainage System to upgrade the quality of the water discharged into the Charles River in Town. This request is to support action items identified in the MOU. In 2003, the EPA National Pollutant Discharge Elimination System (NPDES) Stormwater Drainage Permit took effect. It incorporated several requirements identified in the existing Town's MOU. In April 2016, the second permit issued by the EPA was submitted and went into effect July 1, 2018. This article addresses some of the requirements for NPDES.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction		\$2,070,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$2,070,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Drain System Improvement	Fiscal Year:	2023

Supplemental Information

The Town Reservoir Sediment Removal

The sediment at the bottom of the reservoir is contaminated and must be removed. This is a category 5 impaired water body under NDPES. Category 5 is worst rating a water body can receive from the EPA.

The Town will engage a designer to determine the best way to remove the sediment. This funding request is for the construction phase of the projet. The funding for the design phase was requested in FY2022.

Future Projects (prioritization pending analysis):

Walker Pond
Farley Pond
Forbes Pond
Sabrina Lake
Wildwood Pond
Sportsman's Pond

Changes from Prior Year Submission

This request has been pushed back to FY2023 due to the workload and capacity within Public Works. The Water and Sewer Division is currently under transition with management. The cost has been inflated.

Clarification of Questions

1. There are additional design costs not included in this request. The costs are included in the FY2022 request.
3. Conservation Commission, State, and Federal permitting may be required for dredging.
6. This is a DPW request.
11. Yes, this is a project for which an Initial Eligibility Project Application may be filed with the Community Preservation Committee.

Capital Improvement Plan
January 2020

Capital Project Request					
Project Title: Inflow Feasibility Study				Fiscal Year: 2024	
Request Type:	Feasibility Study	Classification:		Primary Purpose:	
Department:	Sewer Enterprise	Useful Life:		Status:	Informational Only
How was the Project Cost Determined:			Budget Impact:	\$0	
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?					
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?					
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?					
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?					
7. If funded, will the operating budget need to be increased to cover operating expenses?					
8. If funded, will this project lower the requesting Department's operating costs?					
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?					
10. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?					
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?					
12. Is this a request in response to a Court, Federal, or State order?					
13. Is this a request in response to a documented public health or safety condition?					
14. Is this a request to improve or make repairs to extend the useful life of a building?					
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?					
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?					
17. Will any other department be required to provide assistance in order to complete the project?					
18. If funded, will this project increase the operating expense for any other department?					
19. If funded, will additional permanent staff be required?					
Total New FTE's:		Project Description and Considerations			
Project Budget Elements		In 2016, the Town completed a study that Inflow and Infiltration (I/I) removal in areas around Town over the next ten years. The Town has been undertaking I/I projects using funding from private developments. In future years, funding from private developments will be appropriated at Town Meeting.			
Planning/Feasibility					
Design/Engineering					
Land/ROW Acquisition					
Site Preparation					
Construction					
Construction Management					
Equipment					
Furniture, Fixtures, and Equipment					
Technology					
Other Expenses					
TOTAL		\$0			

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Inflow Feasibility Study	Fiscal Year:	2024

Supplemental Information

Project Summary

The Town of Needham is under Administrative Orders from the Department of Environmental Protection (DEP) to identify and remove Infiltration and Inflow (I/I) in existing sewer systems. Failure to address I/I will increase the percentage of costs to the Town. If the Town decreases I/I in comparison to participating communities, its percentage of costs will remain level or decrease.

The Town has implemented an inflow/infiltration removal program and will address inflow separately from infiltration.

Future Projects

Inflow

Inflow is defined as clean, non-septic water that is introduced into the system. This water is ground water or rain water, typically being removed by residential sump pumps draining basements directly into the Town's sewerage system.

Capital Improvement Plan
January 2020

Capital Project Request								
Project Title:		Sewer Main Replacement Design				Fiscal Year:		2022
Request Type:	Design/Engineering	Classification:	Infrastructure	Primary Purpose:	Wastewater Resources	Status:	Existing Project	
Department:	Sewer Enterprise			Useful Life:	More than 20 Years	Project Cost:	\$1,969,500	
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000			
Parameters						Response		
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						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?						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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Yes		
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No		
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No		
12. Is this a request in response to a Court, Federal, or State order?						No		
13. Is this a request in response to a documented public health or safety condition?						No		
14. Is this a request to improve or make repairs to extend the useful life of a building?						No		
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No		
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No		
17. Will any other department be required to provide assistance in order to complete the project?						No		
18. If funded, will this project increase the operating expense for any other department?						No		
19. If funded, will additional permanent staff be required?						No		
Total New FTE's:		0	Project Description and Considerations					
Project Budget Elements		Project Budget		This article is to address the Greendale Avenue/Route 128 sewer interceptor from Cheney Street to Great Plain Avenue. The existing sewer line is deteriorating and in need of rehabilitation/replacement in order to remain functional. The plan is to replace or reline the 12,000 feet (2.25 miles) of 18 inch reinforced concrete gravity sewer main running through Town property along Greendale Avenue near Cheney Street towards Route 128, along the Route 128 right of way, to Great Plain Avenue. This work will be on an interceptor sewer. An interceptor sewer is a trunk sewer that collects and conveys waste water from numerous sewer lines. In FY2024, the Town plans to replace the sewer under Route 128 at Great Plain Avenue using horizontal directional drilling in order to avoid major disruptions to the roadway traffic. (Continue to next page)				
Planning/Feasibility								
Design/Engineering		\$1,950,000						
Land/ROW Acquisition								
Site Preparation								
Construction								
Construction Management								
Equipment								
Furniture, Fixtures, and Equipment								
Technology								
Other Expenses		\$19,500						
TOTAL		\$1,969,500						

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Sewer Main Replacement Design	Fiscal Year:	2022

Supplemental Information

Project Description and Considerations Continued

The Town is currently working on the feasibility study. The feasibility study was delayed due to the requirement for MassDOT permitting for right of way access. The funding request for the design is being pushed back to FY2022 to allow for the completion of the feasibility study.

Other expenses is an allowance for debt issuance related expenses. The project funding is assumed to be debt.

Clarification of Questions

1. After the design has been funded and completed, a request for construction will be necessary. Please refer to the separate submission for FY2024.
3. Massachusetts Department of Transportation (MassDOT) permitting may be required for repair work.
6. The Department of Public Works submitted this request.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Sewer Main Replacement						Fiscal Year: 2024	
Request Type:	Construction	Classification:	Infrastructure	Primary Purpose:	Wastewater Resources	Status:	Existing Project
Department:	Sewer Enterprise			Useful Life:	More than 20 Years	Project Cost:	\$9,090,000
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						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?						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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Yes	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		This article is to address the Greendale Avenue/Route 128 sewer interceptor from Cheney Street to Great Plain Avenue. The existing sewer line is deteriorating and in need of rehabilitation or replacement in order to remain functional. The plan is to replace or reline the 12,000 feet (2.25 miles) of 18 inch reinforced concrete gravity sewer main running through Town property along Greendale Avenue near Cheney Street towards Route 128, along the Route 128 right of way, to Great Plain Avenue. This work will be on an interceptor sewer. An interceptor sewer is a trunk sewer that collects and conveys waste water from numerous sewer lines. In FY2024, the Town plans to replace the sewer under Route 128 at Great Plain Avenue using horizontal directional drilling in order to avoid major disruptions to the roadway traffic. (Continue to next page)			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction		\$9,000,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses		\$90,000					
TOTAL		\$9,090,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Sewer Main Replacement	Fiscal Year:	2024

Supplemental Information

Project Description and Considerations Continued

Other expenses is an allowance for debt issuance related expenses. The project funding is assumed to be debt.

Changes from Prior Year Submission

This request is being pushed back to FY2024 to allow time for the completion of the feasibility study.

Clarification of Questions

1. After the design has been funded and completed, a request for construction will be necessary. Please refer to the separate submission for design work for FY2022.
3. Massachusetts Department of Transportation (MassDOT) permitting may be required for repair work.
6. The Department of Public Works submitted this request.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Charles River Water Treatment Plant HVAC Upgrades					Fiscal Year: 2024		
Request Type:	Design/Engineering	Classification:	Building	Primary Purpose:	Water Resources	Status:	Informational Only
Department:	Water Enterprise			Useful Life:	More than 15 Years	Project Cost:	\$0
How was the Project Cost Determined:			Budget Impact:		Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							Yes
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							No
12. Is this a request in response to a Court, Federal, or State order?							No
13. Is this a request in response to a documented public health or safety condition?							No
14. Is this a request to improve or make repairs to extend the useful life of a building?							Yes
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							Yes
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No
17. Will any other department be required to provide assistance in order to complete the project?							No
18. If funded, will this project increase the operating expense for any other department?							No
19. If funded, will additional permanent staff be required?							No
Total New FTE's:		0	<u>Project Description and Considerations</u>				
Project Budget Elements		Project Budget	Project Summary The Charles River Water Treatment Plant is almost 20 years old. The heating, ventilation, and air conditioning (HVAC) controls are at the end of their useful life. Some of the controls are no longer supported by the manufacturer, making repairs and maintenance difficult. In addition to the HVAC controls, the boilers are also approaching the end of their useful lives. Many of the parts needed to maintain the boilers are no longer manufactured. The existing boilers are inefficient. The setup of the boiler room makes it incredibly difficult to reach some of the equipment that is in need of repair. The domestic hot water heater is also reaching the end of its useful life and is rusting due to cycling.				
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$0					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Charles River Water Treatment Plant HVAC Upgrades	Fiscal Year:	2024

Supplemental Information

The boiler room and entire HVAC system will be reviewed by an outside engineer to determine the best plan to upgrade the outdated equipment and better utilize the existing space.

The equipment at the Charles River Water Treatment Plant will be analyzed to determine what the best equipment given space constraints. Any major construction changes will be determined with this plan. This funding request is for the design phase of the project. The funding for the construction phase will be requested in FY2025.

Clarification of Questions

Supports Other: Supports building infrastructure.

1. This request is for the design phase. The funding for the construction phase will be requested in FY2025.
3. This request may require building permits.
4. This request may require support from ITC.
5. This request will require support from Building Maintenance.
6. This is a DPW request.
15. This request will improve the HVAC in the building.
16. The updates will be permanently installed.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Charles River Water Treatment Plant HVAC Upgrades					Fiscal Year: 2025		
Request Type:	Construction	Classification:	Building	Primary Purpose:	Water Resources	Status:	Informational Only
Department:	Water Enterprise			Useful Life:	More than 15 Years	Project Cost:	\$0
How was the Project Cost Determined:				Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							Yes
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							No
12. Is this a request in response to a Court, Federal, or State order?							No
13. Is this a request in response to a documented public health or safety condition?							No
14. Is this a request to improve or make repairs to extend the useful life of a building?							Yes
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							Yes
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No
17. Will any other department be required to provide assistance in order to complete the project?							No
18. If funded, will this project increase the operating expense for any other department?							No
19. If funded, will additional permanent staff be required?							No
Total New FTE's:				<u>Project Description and Considerations</u>			
Project Budget Elements		Project Budget		Project Summary The Charles River Water Treatment Plant is almost 20 years old. The heating, ventilation, and air conditioning (HVAC) controls are at the end of their useful life. Some of the controls are no longer supported by the manufacturer, making repairs and maintenance difficult. In addition to the HVAC controls, the boilers are also approaching the end of their useful lives. Many of the parts needed to maintain the boilers are no longer manufactured. The existing boilers are inefficient. The setup of the boiler room makes it incredibly difficult to reach some of the equipment that is in need of repair. The domestic hot water heater is also reaching the end of its useful life and is rusting due to cycling.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$0					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Charles River Water Treatment Plant HVAC Upgrades	Fiscal Year:	2025

Supplemental Information

The boiler room and entire HVAC system will be reviewed by an outside engineer to determine the best plan to upgrade the outdated equipment and better utilize the existing space.

The equipment at the Charles River Water Treatment Plant will be analyzed to determine what the best equipment given space constraints. Any major construction changes will be determined with this plan. This funding request is for the construction phase of the project. The funding for the design phase was requested in FY2024.

Clarification of Questions

Supports Other: Supports building infrastructure.

1. This request is for the construction phase. The funding for the design phase was requested in FY2024.
3. This request may require building permits.
4. This request may require support from ITC.
5. This request will require support from Building Maintenance.
6. This is a DPW request.
15. This request will improve the HVAC in the building.
16. The updates will be permanently installed.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Water Distribution Predictive Asset Management						Fiscal Year: 2023	
Request Type:	Feasibility Study	Classification:	Infrastructure	Primary Purpose:	Water Resources	Status:	Informational Only
Department:	Water Enterprise			Useful Life:		Project Cost:	\$0
How was the Project Cost Determined:				Budget Impact:			
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?							
4. If this request is for Technology, has the Department communicated with ITC, and does ITC support the request?							
5. If this request is for Building Improvements, has the Department communicated with the Building Maintenance (BM) division, and does BM support the request?							
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							
7. If funded, will the operating budget need to be increased to cover operating expenses?							
8. If funded, will this project lower the requesting Department's operating costs?							
9. If funded, will this project require ongoing assistance from vendors at an additional expense to the Town which is NOT already budgeted?							
10. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							
12. Is this a request in response to a Court, Federal, or State order?							
13. Is this a request in response to a documented public health or safety condition?							
14. Is this a request to improve or make repairs to extend the useful life of a building?							
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							
17. Will any other department be required to provide assistance in order to complete the project?							
18. If funded, will this project increase the operating expense for any other department?							
19. If funded, will additional permanent staff be required?							
Total New FTE's:				<u>Project Description and Considerations</u>			
Project Budget Elements		Project Budget		The Town currently has an asset management plan, but is looking to ensure the prioritization and criteria included in the existing plan are effective. The study would look at the integrity of the current assets that the Town has and prioritize remaining improvements needed on assets. The assets included in this study would be water mains, hydrants, gate valves, and appurtenances. The study would involve testing the current conditions of the water main pipes to determine if the chemical makeup of the soil is having an effect on the structural integrity of the pipe. Undertaking this study would allow the division to know where the Town needs to make preventative improvements.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$0					

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Water Distribution System Improvements					Fiscal Year: 2022		
Request Type:	Design/Engineering	Classification:	Infrastructure	Primary Purpose:	Water Resources	Status:	Existing Project
Department:	Water Enterprise			Useful Life:	More than 20 Years	Project Cost:	\$372,000
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							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?							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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							Yes
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							No
12. Is this a request in response to a Court, Federal, or State order?							No
13. Is this a request in response to a documented public health or safety condition?							No
14. Is this a request to improve or make repairs to extend the useful life of a building?							No
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							No
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No
17. Will any other department be required to provide assistance in order to complete the project?							No
18. If funded, will this project increase the operating expense for any other department?							No
19. If funded, will additional permanent staff be required?							No
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		Portions of the Town's water infrastructure are over 75 years old and are approaching the end of their useful life. In order to ensure a continual supply of water to the public, the Department of Public Works must partake in a rehabilitation program including maintenance, repair, and replacement of aging pipes. Replacement of water pipes is prioritized, taking into consideration the condition of the pipe, water break history, and adequacy of water flow to fire hydrants. (Continue to next page)			
Planning/Feasibility							
Design/Engineering		\$42,000					
Land/ROW Acquisition							
Site Preparation							
Construction		\$330,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$372,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Water Distribution System Improvements	Fiscal Year:	2022

Supplemental Information

Project Description and Considerations Continued

Rosemary (\$330,000)

There is a water main that is currently located under the lake, making leaks difficult to detect and repairs difficult to conduct. The water main needs to be relocated.

The 8" water main under the lake will be removed and relocated to Rosemary Street. This request is for the construction phase of the project. The design was funded in FY2020.

Mills Road/Sachem Road to Davenport Avenue (\$42,000)

The water main constructed in 1896 is coming to the end of its useful life.

This request is to design and replace 500 linear feet of 8" pipe. This request is for the design phase of the project. The funding for the construction phase will be requested in FY2023.

Mayo Avenue/Harris Avenue to Great Plain Avenue

The water main constructed in 1913 is coming to the end of its useful life.

This request is to design and replace 1,060 linear feet of 8" pipe. This request is for the design phase of the project. The funding for the construction phase will be requested in FY2023.

Changes from Prior Year Submissions

All of the requests for this article are being pushed back a year due to the workload and capacity within Public Works. The Water and Sewer Division is currently under transition with management.

Clarification of Questions

1. After the design has been funded and completed, a request for construction will be necessary. Please refer to the separate submission for FY2023.
3. Conservation Commission permitting may be required for site work.
6. The Department of Public Works submitted this request.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Water Distribution System Improvements					Fiscal Year: 2023		
Request Type:	Construction	Classification:	Infrastructure	Primary Purpose:	Water Resources	Status:	Existing Project
Department:	Water Enterprise			Useful Life:	More than 20 Years	Project Cost:	\$510,000
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							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?							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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							Yes
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							No
12. Is this a request in response to a Court, Federal, or State order?							No
13. Is this a request in response to a documented public health or safety condition?							No
14. Is this a request to improve or make repairs to extend the useful life of a building?							No
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							No
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No
17. Will any other department be required to provide assistance in order to complete the project?							No
18. If funded, will this project increase the operating expense for any other department?							No
19. If funded, will additional permanent staff be required?							No
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		Portions of the Town's water infrastructure are over 75 years old and are approaching the end of their useful life. In order to ensure a continual supply of water to the public, the Department of Public Works must partake in a rehabilitation program including maintenance, repair, and replacement of aging pipes. Replacement of water pipes is prioritized, taking into consideration the condition of the pipe, water break history, and adequacy of water flow to fire hydrants. (Continue to next page)			
Planning/Feasibility							
Design/Engineering		\$105,000					
Land/ROW Acquisition							
Site Preparation							
Construction		\$405,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$510,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Water Distribution System Improvements	Fiscal Year:	2023

Supplemental Information

Project Description and Considerations Continued

This request is for the construction phase of the projects below. The design funding was requested in FY2022.

Mills Road/Sachem Road to Davenport Avenue (\$405,000)

The water main constructed in 1896 is coming to the end of its useful life.

Design and replace 500 linear feet of 8" pipe.

Mayo Avenue/Harris Avenue to Great Plain Avenue

The water main constructed in 1913 is coming to the end of its useful life.

Design and replace 1,060 linear feet of 8" pipe.

This request is for the design phase of the projects listed below. The funding for the construction phase will be requested in FY2024.

Kingsbury Street/Oakland Avenue to Webster Street (\$105,000)

The water main constructed in 1892 and 1965 is coming to the end of its useful life.

Design and replace 1,500 linear feet of 8" pipe.

Oakland Avenue/May Street to Highland Avenue

The water main constructed in 1893 is coming to the end of its useful life.

Design and replace 1,100 linear feet of 8" pipe.

Changes from Prior Year Submission

All of the requests for this article are being pushed back a year due to the workload and capacity within Public Works. The Water and Sewer Division is currently under transition with management.

Clarification of Questions

1. There was design funding requested in FY2022 and there will be construction funding requested in FY2024.
3. Conservation Commission permitting may be required for site work.
6. The Department of Public Works submitted this request.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Water Distribution System Improvements					Fiscal Year: 2024		
Request Type:	Construction	Classification:	Infrastructure	Primary Purpose:	Water Resources	Status:	Existing Project
Department:	Water Enterprise			Useful Life:	More than 20 Years	Project Cost:	\$575,000
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							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?							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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							Yes
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							No
12. Is this a request in response to a Court, Federal, or State order?							No
13. Is this a request in response to a documented public health or safety condition?							No
14. Is this a request to improve or make repairs to extend the useful life of a building?							No
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							No
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No
17. Will any other department be required to provide assistance in order to complete the project?							No
18. If funded, will this project increase the operating expense for any other department?							No
19. If funded, will additional permanent staff be required?							No
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		Portions of the Town's water infrastructure are over 75 years old and are approaching the end of their useful life. In order to ensure a continual supply of water to the public, the Department of Public Works must partake in a rehabilitation program including maintenance, repair, and replacement of aging pipes. Replacement of water pipes is prioritized, taking into consideration the condition of the pipe, water break history, and adequacy of water flow to fire hydrants. (Continue to next page)			
Planning/Feasibility							
Design/Engineering		\$100,000					
Land/ROW Acquisition							
Site Preparation							
Construction		\$475,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$575,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Water Distribution System Improvements	Fiscal Year:	2024

Supplemental Information

Project Description and Considerations Continued

This request is for the construction phase of the projects below. The funding for the design phase was requested in FY2023.

Kingsbury Street/Oakland Avenue to Webster Street (\$475,000)

The water main constructed in 1892 and 1965 is coming to the end of its useful life.

Design and replace 1,500 linear feet of 8" pipe.

Oakland Avenue/May Street to Highland Avenue

The water main constructed in 1893 is coming to the end of its useful life.

Design and replace 1,100 linear feet of 8" pipe.

South Street from Charles River to Chestnut Street (\$100,000)

This request is for the design of the replacement of the water main pipe. It is past its useful life.

Changes from Prior Year Submission

All of the requests for this article are being pushed back a year due to the workload and capacity within Public Works. The Water and Sewer Division is currently under transition with management.

Clarification of Questions

1. Design funding was requested in FY2023 and construction funding will be requested in FY2025.
3. Conservation Commission permitting may be required for site work.
6. The Department of Public Works submitted this request.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Water Distribution System Improvements						Fiscal Year: 2025	
Request Type:	Construction	Classification:	Infrastructure	Primary Purpose:	Water Resources	Status:	Existing-Revised Project
Department:	Water Enterprise			Useful Life:	More than 20 Years	Project Cost:	\$800,000
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						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?						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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Yes	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		Portions of the Town's water infrastructure are over 75 years old and are approaching the end of their useful life. In order to ensure a continual supply of water to the public, the Department of Public Works must partake in a rehabilitation program including maintenance, repair, and replacement of aging pipes. Replacement of water pipes is prioritized, taking into consideration the condition of the pipe, water break history, and adequacy of water flow to fire hydrants. <i>South Street from Charles River to Chestnut Street (\$800,000)</i> The water main pipe is past its useful life. This request is for the construction phase of the replacement of the water main pipe. The design funding was requested in FY2024.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction		\$800,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$800,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Water Distribution System Improvements	Fiscal Year:	2025

Supplemental Information

Changes from Prior Year Submission

All of the requests for this article are being pushed back a year due to the workload and capacity within Public Works. The Water and Sewer Division is currently under transition with management.

Clarification of Questions

1. The design funding was requested in FY2024.
3. Conservation Commission permitting may be required for site work.
6. The Department of Public Works submitted this request.

Capital Improvement Plan
January 2020

Capital Project Request										
Project Title:		Water Service Connections					Fiscal Year:		2022	
Request Type:	Construction	Classification:	Infrastructure	Primary Purpose:	Water Resources	Status:	Existing Project			
Department:	Water Enterprise			Useful Life:	More than 20 Years		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					
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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?								Yes		
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?								No		
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?								No		
12. Is this a request in response to a Court, Federal, or State order?								No		
13. Is this a request in response to a documented public health or safety condition?								Yes		
14. Is this a request to improve or make repairs to extend the useful life of a building?								No		
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?								No		
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?								No		
17. Will any other department be required to provide assistance in order to complete the project?								No		
18. If funded, will this project increase the operating expense for any other department?								No		
19. If funded, will additional permanent staff be required?								No		
Total New FTE's:		0		Project Description and Considerations						
Project Budget Elements		Project Budget		There are old iron pipe water services that may contain lead and need to be removed. System wide, there are approximately 1,000 services that still need to be replaced in the system. Each calendar year has seen the replacement of additional services: CY07 – 126; CY08 – 170; CY09 – 174; CY10 – 17; CY11 – 145; CY12 – 102;						
Planning/Feasibility										
Design/Engineering										
Land/ROW Acquisition										
Site Preparation										
Construction										
Construction Management		\$200,000								
Equipment										
Furniture, Fixtures, and Equipment										
Technology										
Other Expenses										
TOTAL		\$200,000								

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Water Service Connections	Fiscal Year:	2022

Supplemental Information

CY14 – 152;
CY15 – 110;
CY16 – 12*;
CY17 – 140;
CY18 – 121;
CY19 - 55 (as of October 2019)

Total and partial lead services are replaced at least one year prior to a road reconstruction/paving project. Each year, additional services are removed and replaced.

*Decrease in services replaced due to the contracted vendor being released from their contract and the Town rebidding the work.

Clarification of Questions

6. The Department of Public Works submitted this request.

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

Capital Improvement Plan
January 2020

Capital Project Request										
Project Title:		Water Service Connections					Fiscal Year:		2023	
Request Type:	Construction	Classification:	Infrastructure	Primary Purpose:	Water Resources	Status:	Existing Project			
Department:	Water Enterprise			Useful Life:	More than 20 Years		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					
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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?								Yes		
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?								No		
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?								No		
12. Is this a request in response to a Court, Federal, or State order?								No		
13. Is this a request in response to a documented public health or safety condition?								Yes		
14. Is this a request to improve or make repairs to extend the useful life of a building?								No		
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?								No		
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?								No		
17. Will any other department be required to provide assistance in order to complete the project?								No		
18. If funded, will this project increase the operating expense for any other department?								No		
19. If funded, will additional permanent staff be required?								No		
Total New FTE's:		0		Project Description and Considerations						
Project Budget Elements		Project Budget		There are old iron pipe water services that may contain lead and need to be removed. System wide, there are approximately 1,000 services that still need to be replaced in the system. Each calendar year has seen the replacement of additional services: CY07 – 126; CY08 – 170; CY09 – 174; CY10 – 17; CY11 – 145; CY12 – 102;						
Planning/Feasibility										
Design/Engineering										
Land/ROW Acquisition										
Site Preparation										
Construction										
Construction Management		\$200,000								
Equipment										
Furniture, Fixtures, and Equipment										
Technology										
Other Expenses										
TOTAL		\$200,000								

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Water Service Connections	Fiscal Year:	2023

Supplemental Information

CY14 – 152;
CY15 – 110;
CY16 – 12*;
CY17 – 140;
CY18 – 121;
CY19 - 55 (as of October 2019)

Total and partial lead services are replaced at least one year prior to a road reconstruction/paving project. Each year, additional services are removed and replaced.

*Decrease in services replaced due to the contracted vendor being released from their contract and the Town rebidding the work.

Clarification of Questions

6. The Department of Public Works submitted this request.

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

Capital Improvement Plan
January 2020

Capital Project Request								
Project Title:		Water Service Connections				Fiscal Year:		2024
Request Type:	Construction	Classification:	Infrastructure	Primary Purpose:	Water Resources	Status:	Existing Project	
Department:	Water Enterprise			Useful Life:	More than 20 Years	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			
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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							Yes	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							No	
12. Is this a request in response to a Court, Federal, or State order?							No	
13. Is this a request in response to a documented public health or safety condition?							Yes	
14. Is this a request to improve or make repairs to extend the useful life of a building?							No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No	
17. Will any other department be required to provide assistance in order to complete the project?							No	
18. If funded, will this project increase the operating expense for any other department?							No	
19. If funded, will additional permanent staff be required?							No	
Total New FTE's:		0	Project Description and Considerations					
Project Budget Elements		Project Budget						
Planning/Feasibility		There are old iron pipe water services that may contain lead and need to be removed. System wide, there are approximately 1,000 services that still need to be replaced in the system. Each calendar year has seen the replacement of additional services: CY07 – 126; CY08 – 170; CY09 – 174; CY10 – 17; CY11 – 145; CY12 – 102;						
Design/Engineering								
Land/ROW Acquisition								
Site Preparation								
Construction								
Construction Management								
Equipment								
Furniture, Fixtures, and Equipment								
Technology								
Other Expenses								
TOTAL		\$200,000						

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Water Service Connections	Fiscal Year:	2024

Supplemental Information

CY14 – 152;
CY15 – 110;
CY16 – 12*;
CY17 – 140;
CY18 – 121;
CY19 - 55 (as of October 2019)

Total and partial lead services are replaced at least one year prior to a road reconstruction/paving project. Each year, additional services are removed and replaced.

*Decrease in services replaced due to the contracted vendor being released from their contract and the Town rebidding the work.

Clarification of Questions

6. The Department of Public Works submitted this request.

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

Capital Improvement Plan
January 2020

Capital Project Request								
Project Title:		Water Service Connections				Fiscal Year:		2025
Request Type:	Construction	Classification:	Infrastructure	Primary Purpose:	Water Resources	Status:	Existing Project	
Department:	Water Enterprise			Useful Life:	More than 20 Years	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			
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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Yes		
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No		
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No		
12. Is this a request in response to a Court, Federal, or State order?						No		
13. Is this a request in response to a documented public health or safety condition?						Yes		
14. Is this a request to improve or make repairs to extend the useful life of a building?						No		
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No		
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No		
17. Will any other department be required to provide assistance in order to complete the project?						No		
18. If funded, will this project increase the operating expense for any other department?						No		
19. If funded, will additional permanent staff be required?						No		
Total New FTE's:		0	Project Description and Considerations					
Project Budget Elements		Project Budget		There are old iron pipe water services that may contain lead and need to be removed. System wide, there are approximately 1,000 services that still need to be replaced in the system. Each calendar year has seen the replacement of additional services: CY07 – 126; CY08 – 170; CY09 – 174; CY10 – 17; CY11 – 145; CY12 – 102;				
Planning/Feasibility								
Design/Engineering								
Land/ROW Acquisition								
Site Preparation								
Construction								
Construction Management		\$200,000						
Equipment								
Furniture, Fixtures, and Equipment								
Technology								
Other Expenses								
TOTAL		\$200,000						

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Water Service Connections	Fiscal Year:	2025

Supplemental Information

CY14 – 152;
CY15 – 110;
CY16 – 12*;
CY17 – 140;
CY18 – 121;
CY19 - 55 (as of October 2019)

Total and partial lead services are replaced at least one year prior to a road reconstruction/paving project. Each year, additional services are removed and replaced.

*Decrease in services replaced due to the contracted vendor being released from their contract and the Town rebidding the work.

Clarification of Questions

6. The Department of Public Works submitted this request.

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

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Water Supply Development					Fiscal Year: 2022		
Request Type:	Design/Engineering	Classification:	Infrastructure	Primary Purpose:	Water Resources	Status:	Existing-Revised Project
Department:	Water Enterprise			Useful Life:	More than 20 Years	Project Cost:	\$448,000
How was the Project Cost Determined:		Industry References		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							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?							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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							No
12. Is this a request in response to a Court, Federal, or State order?							No
13. Is this a request in response to a documented public health or safety condition?							No
14. Is this a request to improve or make repairs to extend the useful life of a building?							No
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							Yes
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No
17. Will any other department be required to provide assistance in order to complete the project?							No
18. If funded, will this project increase the operating expense for any other department?							No
19. If funded, will additional permanent staff be required?							No
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		<u>Project Summary</u> The Charles River Well Field has three wells, allowing it to operate at full capacity. Whenever one of the wells is taken offline for routine maintenance and repairs, the Town has to rely on MWRA water to meet its daily demands. With an additional fourth well, the Town would be able to take a well offline and continue to operate at its full capacity, allowing for more independence during maintenance periods.			
Planning/Feasibility							
Design/Engineering		\$448,000					
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$448,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Water Supply Development	Fiscal Year:	2022

Supplemental Information

This funding request is for design/engineering phase. The funding for the construction phase will be requested in FY2024. The design/engineering phase includes DEP and Conservation permitting, exploration and test wells program, and the design of a pitless well with appurtenance. The construction phase is for the installation of a well approximately 100' deep with control, pump, and electrical included. There would be no changes to the Town's MWRA withdrawal permit.

Changes from Prior Year Submission

This request is being pushed back to FY2022 to give the Town time to determine the implications of the permit withdrawal. Mass DEP had a withdrawal permit for the Town's wells, which gave them jurisdiction to mandate a water restriction, even though the Town gets supplemental water from MWRA. The Town chose to give up its withdrawal permit and remove it from the jurisdiction of Mass DEP. The Town needs to confirm that creating a redundant well will not force the Town to again enter into a withdrawal permit and be subject to the Mass DEP jurisdiction. The increase in cost is due to inflation.

Clarification of Questions

1. This request is for the design phase. The funding for the construction phase will be requested in FY2024.
3. This project requires permitting from DEP and Conservation.
6. This is a DPW request.
7. The operating budget will need to be increased in order to cover increased monitoring and maintenance expenses associated with having an additional well.
15. The well equipment is intended to be permanently installed at the location of its use.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Water Supply Development					Fiscal Year: 2024		
Request Type:	Construction	Classification:	Infrastructure	Primary Purpose:	Water Resources	Status:	Existing-Revised Project
Department:	Water Enterprise			Useful Life:	More than 20 Years	Project Cost:	\$1,304,000
How was the Project Cost Determined:		Industry References		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							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?							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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							No
12. Is this a request in response to a Court, Federal, or State order?							No
13. Is this a request in response to a documented public health or safety condition?							No
14. Is this a request to improve or make repairs to extend the useful life of a building?							No
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							Yes
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No
17. Will any other department be required to provide assistance in order to complete the project?							No
18. If funded, will this project increase the operating expense for any other department?							No
19. If funded, will additional permanent staff be required?							No
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		<u>Project Summary</u> The Charles River Well Field has three wells, allowing it to operate at full capacity. Whenever one of the wells is taken offline for routine maintenance and repairs, the Town has to rely on MWRA water to meet its daily demands. With an additional fourth well, the Town would be able to take a well offline and continue to operate at its full capacity, allowing for more independence during maintenance periods.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction		\$1,304,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$1,304,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Water Supply Development	Fiscal Year:	2024

Supplemental Information

This funding request is for the construction phase of this project. . The design/engineering phase includes DEP and Conservation permitting, exploration and test wells program, and the design of a pitless well with appurtenance. The construction phase is for the installation of a well approximately 100' deep with control, pump, and electrical included. There would be no changes to the Town's MWRA withdrawal permit.

Changes from Prior Year Submission

This request is being pushed back to FY2024 to give the Town time to determine the implications of the permit withdrawal. Mass DEP had a withdrawal permit for the Town's wells, which gave them jurisdiction to mandate a water restriction, even though the Town gets supplemental water from MWRA. The Town chose to give up its withdrawal permit and remove it from the jurisdiction of Mass DEP. The Town needs to confirm that creating a redundant well will not force the Town to again enter into a withdrawal permit and be subject to the Mass DEP jurisdiction. The increase in cost is due to inflation.

Clarification of Questions

1. This request is for the construction phase. The funding for the design phase was requested in FY2022.
3. This project requires permitting from DEP and Conservation.
6. This is a DPW request.
7. The operating budget will need to be increased in order to cover increased monitoring and maintenance expenses associated with having an additional well.
15. The well equipment is intended to be permanently installed at the location of its use.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Personal Protective Equipment						Fiscal Year: 2021	
Request Type: Acquisition	Classification: Equipment	Primary Purpose: Public Safety		Status: Existing Project			
Department: Fire		Useful Life: More than 5 Years	Project Cost: \$43,424				
How was the Project Cost Determined: In-House Estimate		Budget Impact: Negligible impact on the annual operating expenses less than \$5,000					
Parameters				Response			
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?				No			
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?				No			
3. Does this project require any permitting by any Town or State agency?				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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?				Not Applicable			
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?				No			
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?				No			
12. Is this a request in response to a Court, Federal, or State order?				No			
13. Is this a request in response to a documented public health or safety condition?				Yes			
14. Is this a request to improve or make repairs to extend the useful life of a building?				No			
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?				No			
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?				No			
17. Will any other department be required to provide assistance in order to complete the project?				No			
18. If funded, will this project increase the operating expense for any other department?				No			
19. If funded, will additional permanent staff be required?				No			
Total New FTE's: 0		Project Description and Considerations					
Project Budget Elements		Project Budget		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. (Continue to next page)			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment		\$43,424					
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$43,424					

Capital Project Request

Project Title: Personal Protective Equipment

Fiscal Year:

2021

Supplemental Information

Project Description and Considerations Continued

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.

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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.

Clarification of Questions

Question 13. 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>

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Personal Protective Equipment						Fiscal Year: 2022	
Request Type: Acquisition	Classification: Equipment	Primary Purpose: Public Safety		Status: Existing Project			
Department: Fire		Useful Life: More than 5 Years	Project Cost: \$43,424				
How was the Project Cost Determined: In-House Estimate		Budget Impact: Negligible impact on the annual operating expenses less than \$5,000					
Parameters				Response			
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?				No			
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?				No			
3. Does this project require any permitting by any Town or State agency?				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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?				Not Applicable			
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?				No			
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?				No			
12. Is this a request in response to a Court, Federal, or State order?				No			
13. Is this a request in response to a documented public health or safety condition?				Yes			
14. Is this a request to improve or make repairs to extend the useful life of a building?				No			
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?				No			
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?				No			
17. Will any other department be required to provide assistance in order to complete the project?				No			
18. If funded, will this project increase the operating expense for any other department?				No			
19. If funded, will additional permanent staff be required?				No			
Total New FTE's: 0		Project Description and Considerations					
Project Budget Elements		Project Budget		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. (Continue to next page)			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment		\$43,424					
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$43,424					

Capital Project Request

Project Title: Personal Protective Equipment

Fiscal Year:

2022

Supplemental Information

Project Description and Considerations Continued

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.

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Clarification of Questions

Question 13. 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>

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Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Personal Protective Equipment						Fiscal Year: 2023	
Request Type: Acquisition	Classification: Equipment	Primary Purpose: Public Safety		Status: Existing Project			
Department: Fire		Useful Life: More than 5 Years	Project Cost: \$43,424				
How was the Project Cost Determined: In-House Estimate		Budget Impact: Negligible impact on the annual operating expenses less than \$5,000					
Parameters				Response			
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?				No			
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?				No			
3. Does this project require any permitting by any Town or State agency?				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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?				Not Applicable			
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?				No			
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?				No			
12. Is this a request in response to a Court, Federal, or State order?				No			
13. Is this a request in response to a documented public health or safety condition?				Yes			
14. Is this a request to improve or make repairs to extend the useful life of a building?				No			
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?				No			
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?				No			
17. Will any other department be required to provide assistance in order to complete the project?				No			
18. If funded, will this project increase the operating expense for any other department?				No			
19. If funded, will additional permanent staff be required?				No			
Total New FTE's: 0		Project Description and Considerations					
Project Budget Elements		Project Budget		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. (Continue to next page)			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment		\$43,424					
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$43,424					

Capital Project Request

Project Title: Personal Protective Equipment

Fiscal Year:

2023

Supplemental Information

Project Description and Considerations Continued

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.

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Clarification of Questions

Question 13. 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:

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

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Personal Protective Equipment						Fiscal Year: 2024	
Request Type: Acquisition	Classification: Equipment	Primary Purpose: Public Safety		Status: Existing Project			
Department: Fire		Useful Life: More than 5 Years	Project Cost: \$43,424				
How was the Project Cost Determined: In-House Estimate		Budget Impact: Negligible impact on the annual operating expenses less than \$5,000					
Parameters				Response			
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?				No			
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?				No			
3. Does this project require any permitting by any Town or State agency?				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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?				Not Applicable			
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?				No			
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?				No			
12. Is this a request in response to a Court, Federal, or State order?				No			
13. Is this a request in response to a documented public health or safety condition?				Yes			
14. Is this a request to improve or make repairs to extend the useful life of a building?				No			
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?				No			
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?				No			
17. Will any other department be required to provide assistance in order to complete the project?				No			
18. If funded, will this project increase the operating expense for any other department?				No			
19. If funded, will additional permanent staff be required?				No			
Total New FTE's: 0		Project Description and Considerations					
Project Budget Elements		Project Budget		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. (Continue to next page)			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment		\$43,424					
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$43,424					

Capital Project Request

Project Title: Personal Protective Equipment

Fiscal Year:

2024

Supplemental Information

Project Description and Considerations Continued

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.

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

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Library Furniture						Fiscal Year: 2021	
Request Type: Acquisition	Classification: Equipment	Primary Purpose: Culture and Leisure		Status: Existing-Revised Project			
Department: Library	Useful Life: More than 9 Years		Project Cost: \$84,168				
How was the Project Cost Determined: Industry References		Budget Impact: Negligible impact on the annual operating expenses less than \$5,000					
Parameters				Response			
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?				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?				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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?				Not Applicable			
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?				No			
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?				No			
12. Is this a request in response to a Court, Federal, or State order?				No			
13. Is this a request in response to a documented public health or safety condition?				No			
14. Is this a request to improve or make repairs to extend the useful life of a building?				No			
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?				Yes			
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?				No			
17. Will any other department be required to provide assistance in order to complete the project?				Yes			
18. If funded, will this project increase the operating expense for any other department?				No			
19. If funded, will additional permanent staff be required?				No			
Total New FTE's: 0		<u>Project Description and Considerations</u>					
Project Budget Elements		Project Budget		This is a request to replace 42 public lounge chairs (cloth). The "new" library has been open to the public for more than thirteen years, and, due to heavy use, the furniture is showing wear and tear, especially on the lounge chair arms. The price listed in this request was obtained by a call to the manufacturer. 42 public lounge chairs (cloth) @\$2004 each = \$84,168 This would be year three of the original four-year plan for library furniture replacement. 1. The services of a design consultant may be needed. 15. All the furniture would be installed at the library.			
Planning/Feasibility	\$0						
Design/Engineering	\$0						
Land/ROW Acquisition	\$0						
Site Preparation	\$0						
Construction	\$0						
Construction Management	\$0						
Equipment	\$0						
Furniture, Fixtures, and Equipment	\$84,168						
Technology	\$0						
Other Expenses	\$0						
TOTAL		\$84,168					

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Library Technology Plan						Fiscal Year: 2021	
Request Type: Acquisition	Classification: Technology	Primary Purpose: Culture and Leisure		Status: Resubmitted Project			
Department: Library		Useful Life: More than 5 Years	Project Cost: \$30,000				
How was the Project Cost Determined: Industry References		Budget Impact: Negligible impact on the annual operating expenses less than \$5,000					
Parameters				Response			
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?				No			
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?				No			
3. Does this project require any permitting by any Town or State agency?				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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?				Not Applicable			
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?				No			
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?				No			
12. Is this a request in response to a Court, Federal, or State order?				No			
13. Is this a request in response to a documented public health or safety condition?				No			
14. Is this a request to improve or make repairs to extend the useful life of a building?				No			
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?				Yes			
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?				No			
17. Will any other department be required to provide assistance in order to complete the project?				No			
18. If funded, will this project increase the operating expense for any other department?				No			
19. If funded, will additional permanent staff be required?				No			
Total New FTE's:		<u>Project Description and Considerations</u>					
Project Budget Elements		Project Budget					
Planning/Feasibility		15. All equipment will be installed at the library. FY2021--Replace 20 staff computers (Circulation 7; Children's 5; Reference 3; Technical Services 3; Administration 2) @ \$1,500 each = \$30,000					
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$30,000					

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Library Technology Plan						Fiscal Year: 2022	
Request Type: Acquisition	Classification: Technology	Primary Purpose: Culture and Leisure	Status: Resubmitted Project				
Department: Library	Useful Life: More than 5 Years	Project Cost: \$48,500					
How was the Project Cost Determined: Industry References		Budget Impact: Negligible impact on the annual operating expenses less than \$5,000					
Parameters			Response				
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?			No				
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?			No				
3. Does this project require any permitting by any Town or State agency?			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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?			Not Applicable				
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No				
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			No				
12. Is this a request in response to a Court, Federal, or State order?			No				
13. Is this a request in response to a documented public health or safety condition?			No				
14. Is this a request to improve or make repairs to extend the useful life of a building?			No				
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			Yes				
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?			No				
17. Will any other department be required to provide assistance in order to complete the project?			No				
18. If funded, will this project increase the operating expense for any other department?			No				
19. If funded, will additional permanent staff be required?			No				
Total New FTE's:		Project Description and Considerations					
Project Budget Elements		Project Budget					
Planning/Feasibility		15. All equipment will be installed at the library. FY2022--Replace 29 public computers (Adult 20; Young Adult 4; Children's 4; Community Room 1; @ \$1,500 each = \$43,500 Replace 2 self-check computers @ \$2,500 each 5,000 Self-check computers are more expensive than regular computers as they require a touch screen and encompass the CPU/computer part, receipt printer, and barcode scanner.					
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology \$48,500							
Other Expenses							
TOTAL		\$48,500					

Capital Improvement Plan
January 2020

Capital Project Request															
Project Title: Library Technology Plan						Fiscal Year: 2023									
Request Type: Acquisition	Classification: Technology	Primary Purpose: Culture and Leisure		Status: Resubmitted Project											
Department: Library	Useful Life: More than 5 Years		Project Cost: \$26,280												
How was the Project Cost Determined: Industry References		Budget Impact: Negligible impact on the annual operating expenses less than \$5,000													
Parameters				Response											
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?				No											
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?				No											
3. Does this project require any permitting by any Town or State agency?				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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?				Not Applicable											
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?				No											
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?				No											
12. Is this a request in response to a Court, Federal, or State order?				No											
13. Is this a request in response to a documented public health or safety condition?				No											
14. Is this a request to improve or make repairs to extend the useful life of a building?				No											
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?				Yes											
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?				No											
17. Will any other department be required to provide assistance in order to complete the project?				No											
18. If funded, will this project increase the operating expense for any other department?				No											
19. If funded, will additional permanent staff be required?				No											
Total New FTE's:		Project Description and Considerations													
Project Budget Elements		Project Budget													
Planning/Feasibility		15. All equipment will be installed at the library. FY2023: <table style="width: 100%;"> <tr> <td>Replace Program Specialist's 2 computers @\$3,500 each</td> <td style="text-align: right;">\$7,000</td> </tr> <tr> <td>Replace 16 barcode scanners (Circulation 6; Children's 5; Reference 5) @ 312.40 each</td> <td style="text-align: right;">5,000</td> </tr> <tr> <td>Replace 24 receipt printers (Circulation 10; Children's 6; Reference 5; Technical Services 3) @345 each</td> <td style="text-align: right;">8,280</td> </tr> <tr> <td>Replace 4 staff computers (Archives, Assistant Director; Reference Supervisor; Circulation Assistant: @ \$1,500 each</td> <td style="text-align: right;">6,000</td> </tr> </table>						Replace Program Specialist's 2 computers @\$3,500 each	\$7,000	Replace 16 barcode scanners (Circulation 6; Children's 5; Reference 5) @ 312.40 each	5,000	Replace 24 receipt printers (Circulation 10; Children's 6; Reference 5; Technical Services 3) @345 each	8,280	Replace 4 staff computers (Archives, Assistant Director; Reference Supervisor; Circulation Assistant: @ \$1,500 each	6,000
Replace Program Specialist's 2 computers @\$3,500 each	\$7,000														
Replace 16 barcode scanners (Circulation 6; Children's 5; Reference 5) @ 312.40 each	5,000														
Replace 24 receipt printers (Circulation 10; Children's 6; Reference 5; Technical Services 3) @345 each	8,280														
Replace 4 staff computers (Archives, Assistant Director; Reference Supervisor; Circulation Assistant: @ \$1,500 each	6,000														
Design/Engineering															
Land/ROW Acquisition															
Site Preparation															
Construction															
Construction Management															
Equipment															
Furniture, Fixtures, and Equipment															
Technology \$26,280															
Other Expenses															
TOTAL		\$26,280													

Capital Improvement Plan
January 2020

Capital Project Request																			
Project Title: Library Technology Plan						Fiscal Year: 2024													
Request Type: Acquisition	Classification: Technology	Primary Purpose: Culture and Leisure		Status: Resubmitted Project															
Department: Library	Useful Life: More than 5 Years		Project Cost: \$36,500																
How was the Project Cost Determined: Industry References		Budget Impact: Negligible impact on the annual operating expenses less than \$5,000																	
Parameters				Response															
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?				No															
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?				No															
3. Does this project require any permitting by any Town or State agency?				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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?				Not Applicable															
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?				No															
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?				No															
12. Is this a request in response to a Court, Federal, or State order?				No															
13. Is this a request in response to a documented public health or safety condition?				No															
14. Is this a request to improve or make repairs to extend the useful life of a building?				No															
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?				Yes															
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?				No															
17. Will any other department be required to provide assistance in order to complete the project?				No															
18. If funded, will this project increase the operating expense for any other department?				No															
19. If funded, will additional permanent staff be required?				No															
Total New FTE's:		Project Description and Considerations																	
Project Budget Elements		Project Budget																	
Planning/Feasibility		15. All equipment will be installed at the library. FY2024: <table style="width: 100%; border-collapse: collapse;"> <tr> <td>Replace Server</td> <td style="text-align: right;">\$12,000</td> </tr> <tr> <td>Replace 15 Public Catalog Computers @ \$700 each</td> <td style="text-align: right;">10,500</td> </tr> <tr> <td>Replace 5 UPS (Server; 2 Tel/Data Closets; Community Room, Wireless @ \$200 each</td> <td style="text-align: right;">1,000</td> </tr> <tr> <td>Replace Large Format Printer</td> <td style="text-align: right;">1,000</td> </tr> <tr> <td>Replace Microfilm Machine</td> <td style="text-align: right;">12,000</td> </tr> <tr> <td style="text-align: right;">Total</td> <td style="text-align: right;">\$36,500</td> </tr> </table>						Replace Server	\$12,000	Replace 15 Public Catalog Computers @ \$700 each	10,500	Replace 5 UPS (Server; 2 Tel/Data Closets; Community Room, Wireless @ \$200 each	1,000	Replace Large Format Printer	1,000	Replace Microfilm Machine	12,000	Total	\$36,500
Replace Server	\$12,000																		
Replace 15 Public Catalog Computers @ \$700 each	10,500																		
Replace 5 UPS (Server; 2 Tel/Data Closets; Community Room, Wireless @ \$200 each	1,000																		
Replace Large Format Printer	1,000																		
Replace Microfilm Machine	12,000																		
Total	\$36,500																		
Design/Engineering																			
Land/ROW Acquisition																			
Site Preparation																			
Construction																			
Construction Management																			
Equipment																			
Furniture, Fixtures, and Equipment																			
Technology																			
Other Expenses																			
TOTAL		\$36,500																	

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Library Space Planning Consultant						Fiscal Year: 2021	
Request Type:	Feasibility Study	Classification:	Infrastructure	Primary Purpose:	Culture and Leisure	Status:	Resubmitted Project
Department:	Library			Useful Life:	More than 15 Years	Project Cost:	\$60,000
How was the Project Cost Determined:		Industry References		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						Yes	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						Yes	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:				Project Description and Considerations			
Project Budget Elements		Project Budget		The library trustees desire to hire a professional library space planner to determine if the library's interior space could be better arranged to accommodate the many students and tutors that use the library's study rooms and study areas. In the afternoons, during the school year, the library is packed with students, tutors, and other people using the three study rooms, the row of carrels, and the many four-seat tables. The trustees are also interested in updating the furniture and exploring a set-up that would allow the library to use an automatic materials handler that would check in and sort returned materials.			
Planning/Feasibility		\$60,000					
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$60,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Library Space Planning Consultant	Fiscal Year:	2021

Supplemental Information

1. There may be bidding costs
14. A space-use rearrangement that replaces worn and chipped furniture with new and up-to-date items and creates a more efficient use of space will improve and increase the usefulness of the library's space and extend the library's life as a study and work place.
17. PPBC could become involved.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Library Materials Handler		Fiscal Year: 2022					
Request Type: Acquisition	Classification: Building	Primary Purpose: Culture and Leisure		Status: Informational Only			
Department: Library	Useful Life: More than 5 Years		Project Cost: \$0				
How was the Project Cost Determined: Industry References		Budget Impact: May increase annual operating expenses between \$5,001 and \$25,000					
Parameters				Response			
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?				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?				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?				No			
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?				Not Applicable			
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?				No			
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?				No			
12. Is this a request in response to a Court, Federal, or State order?				No			
13. Is this a request in response to a documented public health or safety condition?				No			
14. Is this a request to improve or make repairs to extend the useful life of a building?				No			
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?				Yes			
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?				No			
17. Will any other department be required to provide assistance in order to complete the project?				Yes			
18. If funded, will this project increase the operating expense for any other department?				No			
19. If funded, will additional permanent staff be required?				No			
Total New FTE's: 0		Project Description and Considerations					
Project Budget Elements		Project Budget					
Planning/Feasibility		This is a request for a barcode-based automated materials handling and sorting system that would be used for checking in returned materials. It replaces the previous requests for an RFID (Radio Frequency Identification) system. It does not require the tagging of each library item, as it works off the already attached item barcode. The sorter and its software would be ready to work, as soon as installation occurred. There would be no yearly expense for tagging each new item nor the expense of tagging the 175,000 items that already constitute the library's collections; however there would be a yearly service contract (as there would be on an RFID system). (numbers 7 & 9) 15--All equipment would be installed at the library. 17--Assistance will most likely be required from the Building Maintenance division of Public Works or the PPBC depending on the final cost estimate.					
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$0					

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Public Playgrounds						Fiscal Year: 2022	
Request Type:	Acquisition	Classification:	Equipment	Primary Purpose:	Culture and Leisure	Status:	Existing Project
Department:	Park & Recreation			Useful Life:	More than 15 Years	Project Cost:	\$600,000
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?							No
3. Does this project require any permitting by any Town or State agency?							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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							Not Applicable
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							Yes
12. Is this a request in response to a Court, Federal, or State order?							No
13. Is this a request in response to a documented public health or safety condition?							No
14. Is this a request to improve or make repairs to extend the useful life of a building?							No
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							No
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No
17. Will any other department be required to provide assistance in order to complete the project?							Yes
18. If funded, will this project increase the operating expense for any other department?							No
19. If funded, will additional permanent staff be required?							No
Total New FTE's:		0	Project Description and Considerations				
Project Budget Elements		Project Budget		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. With the addition of two locations at the Williams School, there are now 20. Hillside has the oldest school playground equipment. It was updated in 2011 and will be able to remain in use for neighbors and visitors to the site, unless there are conflicts with future uses of the school site. It is recommended that the Hillside-Kindergarten playground be removed. The Mitchell School replaced their playground in Fall 2018, and added Kindergarten age features. If the future school plans require a new location for playgrounds, this equipment can be relocated. The Williams School had new playground			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction		\$600,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$600,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Public Playgrounds	Fiscal Year:	2022

Supplemental Information

Project Description and Considerations Continued

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. 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. The Exchange Club has "adopted" DeFazio and Claxton, adding improvements over several years, and the Women's Club has reached out to offer support for upgrades at DeFazio. 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.

Though wood fiber surfacing is currently considered ADA compliant, the MA Architectural Access Board may be creating a new ruling that will require other options for pathways, with the predominate recommendation that pathways be poured-in-place rubber. 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. Some funding was received at May 2019 Annual Town Meeting for some ADA improvements at Greene's Field and Cricket Field, and remaining funds will go towards poured-in-place pathways, to begin that process.

Over the past year, the Park and Recreation Commission has received input from user groups on suggested renovations to the tot-lot at DeFazio Park and the tot-lot at Perry Park. Informal concepts for improvements have been put together, to gain a better understanding of possible costs. The Commission will now form a study committee to help focus on actual goals for each park. The request for funding has been moved out a year to allow for the process to continue. The estimate is partially based on the concept plans, and the cost range for poured-in-place pathways, including installation at \$30-40 per square foot.

Clarification of Questions

6. Unknown

11. This project may be eligible for Community Preservation Funds.

17. The school projects will require consultation with the School Department, insuring their educational goals are met with any new structures.

Capital Improvement Plan
January 2020

Capital Project Request				
Project Title:	Public Playgrounds		Fiscal Year:	2022

PLAYGROUND	MANUFACTURER	YEAR	SURFACING	CURRENT CONDITIONS/FUNDING
Broadmeadow	Miracle	2002	Fiber	fair/good; financed PPBC/PTC donations
Broadmeadow-Kindergarten	Miracle	2002	Fiber	fair/good; financed PPBC/PTC donations
Claxton	Landscape Structures	1994/2007	Fiber/tile	very good; Exchange Club donations
Cricket	Landscape Structures	2005	Fiber	very good; Parent Talk donations
DeFazio	Landscape Structures	1997/1999	Fiber	good; Exchange Club donations
Eliot	Landscape Structures	2004	Fiber	very good; financed PPBC/PTC donations
Eliot-Kindergarten	Landscape Structures	2004	Fiber	very good; financed PPBC/PTC donations
Greene's	Landscape Structures	2013	Fiber/PIP	excellent; CPA/donations
Hillside	Landscape Structures	1995/2011	Fiber	very good; PTC donations
Hillside-Kindergarten	Kompan	2001	Fiber	good; RCN payment/PTC donations
Mills	Landscape Structures	2007	Fiber/tile	very good; Parent Talk donations
Mitchell	Landscape Structures	2018	Fiber/PIP	excellent; School Department
Newman	Landscape Structures	2012	syn grass	excellent; PPBC/PTC/Town
Newman-Kindergarten	Landscape Structures	2012	syn grass	excellent; PPBC/PTC/Town
Newman-Preschool	Landscape Structures	1998/2004	PIP	very good; PTC donations/CPC
Rebecca Perry	Landscape Structures	2001	Fiber	very good; Parent Talk donations
Riverside	Landscape Structures	2004/2007	Fiber	very good; Hanover Company
Walker-Gordon	Landscape Structures	2013	Fiber	excellent; Town
Williams	Landscape Structures	2019	PIP	excellent; PPBC
Williams-Kindergarten	Landscape Structures	2019	PIP	excellent; PPBC

Capital Improvement Plan
January 2020

Capital Project Request								
Project Title:		Athletic Fields Master Plan				Fiscal Year:		2025
Request Type:	Feasibility Study	Classification:	Land	Primary Purpose:	Culture and Leisure	Status:	Resubmitted Project	
Department:	Park & Recreation			Useful Life:	More than 15 Years	Project Cost:	\$75,000	
How was the Project Cost Determined:			Budget Impact:					
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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							Not Applicable	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							Yes	
12. Is this a request in response to a Court, Federal, or State order?							No	
13. Is this a request in response to a documented public health or safety condition?							No	
14. Is this a request to improve or make repairs to extend the useful life of a building?							No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No	
17. Will any other department be required to provide assistance in order to complete the project?							Yes	
18. If funded, will this project increase the operating expense for any other department?							No	
19. If funded, will additional permanent staff be required?							No	
Total New FTE's:		0	Project Description and Considerations					
Project Budget Elements		Project Budget		Clarification of Questions: 11. This proposal would likely be eligible for Community Preservation funding. 17. Input from DPW Parks and Forestry staff will be important, particularly related to future maintenance tasks for any recommended new athletic fields. The purpose of this study is to review uses of existing athletic fields and determine whether new athletic fields are needed, or if scheduling changes can be made to accommodate all the requests for use. The master plan would also include a review of some possible parcels.				
Planning/Feasibility		\$75,000						
Design/Engineering								
Land/ROW Acquisition								
Site Preparation								
Construction								
Construction Management								
Equipment								
Furniture, Fixtures, and Equipment								
Technology								
Other Expenses								
TOTAL		\$75,000						

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Athletic Fields Master Plan	Fiscal Year:	2025

Supplemental Information

Over the past twenty years, the Park and Recreation Commission has worked with the user groups to best optimize the uses of the athletic fields without jeopardizing the maintenance plan. New programs have been added to the fields since this work began, or groups have expanded their programs, so current use is maximized on the fields. In 2018, Flag Football was a new program that uses multi-purpose fields. In the near future, it is anticipated that there will be new programs for field hockey and rugby, and there is a regional growth for cricket fields.

Athletic Fields have been renovated at several parks and schools, improving safety, and allowing for better utilization. As an example, the fields at the Newman School were renovated, with the addition of an extensive drainage system. This allowed the two 60' diamonds and the full-size multi-purpose field to be used more often rather than constantly shutting down use of the fields due to their wet conditions. The addition of synthetic fields with lights at Memorial Park and DeFazio Park in 2008-2009 provided additional space, and took some pressure off of the natural grass fields.

The ability for the Town to maintain current athletic facilities, along with any possible new facilities, would be included within the study.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Boat Launch on Charles River						Fiscal Year: 2023	
Request Type:	Construction	Classification:	Land	Primary Purpose:	Culture and Leisure	Status:	Existing-Revised Project
Department:	Park & Recreation			Useful Life:	More than 15 Years	Project Cost:	TBD
How was the Project Cost Determined:		No Estimate Has Been Determined		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						Yes	
4. If 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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Yes	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						Yes	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						Yes	
17. Will any other department be required to provide assistance in order to complete the project?						Yes	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		<u>Project Description and Considerations</u>			
Project Budget Elements		Project Budget		Clarification of Questions: 3. As the property is adjacent to the Charles River, permits will be required through the Conservation Commission and DEP. 6. As this project is a goal of the Select Board, the DPW has been involved in discussions, and will assist with the design phase. 11. This project is likely eligible for CPC funding. 16. This project would improve the current launch area for canoes/kayaks onto the Charles River. 17. This project would be a partnership between Park and Recreation and DPW, with guidance from Conservation.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$0					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Boat Launch on Charles River	Fiscal Year:	2023

Supplemental Information

The design has been funded for this project, but has not moved forward. An on-call engineer will be chosen to work on the final design. The estimate is a place holder until final decisions are made on the specifics of the project.

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

CPA funds of \$30,000 have been appropriated for the design of an improved boat launch into the Charles River on Town-owned property under the jurisdiction of the Park and Recreation Commission on South Street. There is an existing unimproved launch for canoes and kayaks, with a circular driveway and parking for 10-12 vehicles. Eversource has just installed a vault on South Street, adjacent to the property, with two access points located just within the property. 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 pervious 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.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Cricket Field Building Renovation Design					Fiscal Year: 2022		
Request Type:	Design/Engineering	Classification:	Building	Primary Purpose:	Culture and Leisure	Status:	Existing-Revised Project
Department:	Park & Recreation			Useful Life:	More than 20 Years	Project Cost:	\$180,000
How was the Project Cost Determined:		Hired Consultant		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?							No
3. Does this project require any permitting by any Town or State agency?							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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							Yes
12. Is this a request in response to a Court, Federal, or State order?							No
13. Is this a request in response to a documented public health or safety condition?							No
14. Is this a request to improve or make repairs to extend the useful life of a building?							No
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							No
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No
17. Will any other department be required to provide assistance in order to complete the project?							Yes
18. If funded, will this project increase the operating expense for any other department?							No
19. If funded, will additional permanent staff be required?							No
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		Clarification of Questions: 11. This project is <u>partially</u> eligible for CPC funding. Any portion of the project related to outdoor recreation is eligible, but any portion related to indoor recreation is not eligible. 17. This project would be a partnership between Park and Recreation and DPW. To be determined is whether it would fall under the oversight of the PPBC. (continued on next page)			
Planning/Feasibility							
Design/Engineering		\$180,000					
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$180,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Cricket Field Building Renovation Design	Fiscal Year:	2022

Supplemental Information

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.

Since the 2012 study, Park and Recreation now has an indoor programming space at the Rosemary Recreation Complex, so year-round programming space is not needed at Cricket. The building is an essential component of our summer program offerings, as there is no additional space available at the schools in the summer. High School Athletics uses the building in the spring and fall. Some of the interior design features in the feasibility study are not needed in the final design.

The design estimate has been escalated 5% per year from the original estimate from Bargmann Hendrie + Archetype, Inc. It is based on 20% of the estimated cost of construction.

The building is currently used for (a) Park and Recreation summer program; (b) Needham High Girls Soccer (fall) and Girls Lacrosse (spring); (c) storage for Park and Recreation programs; (d) storage for DPW Parks & 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 connection 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. Costs would rise for Needham High School Athletics, with the need for restrooms and storage on site. Donations have been made for other projects at the parking, totaling more than \$200,000. Those projects include a prior renovation of the fields (recently re-done with Town funds), 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 Division and the Planning Board. The costs do not include any unanticipated requirements from the permits.

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 for public use will increase the cost for cleaning by an outside firm.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Cricket Field Building Renovation Construction						Fiscal Year: 2023	
Request Type:	Construction	Classification:	Building	Primary Purpose:	Culture and Leisure	Status:	Existing-Revised Project
Department:	Park & Recreation			Useful Life:	More than 20 Years	Project Cost:	\$900,706
How was the Project Cost Determined:		Hired Consultant		Budget Impact:	May increase annual operating expenses between \$5,001 and \$25,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						Yes	
4. If 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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						Yes	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						Yes	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		Clarification of Questions: 3. Permits required through Planning Board and Public Health Division 7. Possible increase in budget to cover restroom cleaning 11. This project is <u>partially</u> eligible for CPC funding. Any portion of the project related to outdoor recreation is eligible, but any portion related to indoor recreation is not eligible. 17. This project would be a partnership between Park and Recreation and DPW. To be determined is whether it would fall under the oversight of the PPBC. (continued on next page)			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction		\$900,706					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$900,706					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Cricket Field Building Renovation Construction	Fiscal Year:	2023

Supplemental Information

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.

Since the 2012 study, Park and Recreation now has an indoor programming space at the Rosemary Recreation Complex, so year-round programming space is not needed at Cricket. The building is an essential component of our summer program offerings, as there is no additional space available at the schools in the summer. High School Athletics uses the building in the spring and fall. Some of the interior design features in the feasibility study are not needed in the final design.

The design estimate has been escalated 5% per year from the original estimate from Bargmann Hendrie + Archetype, Inc. It is based on 20% of the estimated cost of construction which has been escalated.

The building is currently used for (a) Park and Recreation summer program; (b) Needham High Girls Soccer (fall) and Girls Lacrosse (spring); (c) storage for Park and Recreation programs; (d) storage for DPW Parks & 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 connection 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. Costs would rise for Needham High School Athletics, with the need for restrooms and storage on site. Donations have been made for other projects at the parking, totaling more than \$200,000. Those projects include a prior renovation of the fields (recently re-done with Town funds), 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 Division and the Planning Board. The costs do not include any unanticipated requirements from the permits.

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 for public use will increase the cost for cleaning by an outside firm.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Outdoor Basketball Courts						Fiscal Year: 2022	
Request Type:	Construction	Classification:	Infrastructure	Primary Purpose:	Culture and Leisure	Status:	Existing Project
Department:	Park & Recreation			Useful Life:	More than 15 Years	Project Cost:	\$135,000
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?							No
3. Does this project require any permitting by any Town or State agency?							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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							Yes
12. Is this a request in response to a Court, Federal, or State order?							No
13. Is this a request in response to a documented public health or safety condition?							No
14. Is this a request to improve or make repairs to extend the useful life of a building?							No
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							No
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No
17. Will any other department be required to provide assistance in order to complete the project?							Yes
18. If funded, will this project increase the operating expense for any other department?							No
19. If funded, will additional permanent staff be required?							No
Total New FTE's:		0	Project Description and Considerations				
Project Budget Elements		Project Budget		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.			
Planning/Feasibility							
Design/Engineering		\$30,000					
Land/ROW Acquisition							
Site Preparation							
Construction		\$105,000					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$135,000					

Capital Improvement Plan
January 2020

Capital Project Request

Project Title: Outdoor Basketball Courts

Fiscal Year: 2022

Supplemental Information

Clarification of Questions

6. Unknown

11. This project may be eligible for Community Preservation Funds.

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

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Open Space Land						Fiscal Year: 2021	
Request Type:	Acquisition	Classification:	Land	Primary Purpose:	Culture and Leisure	Status:	Resubmitted Project
Department:	Park & Recreation	Useful Life:	More than 20 Years	Project Cost:	\$1,000,000		
How was the Project Cost Determined:		Budget Impact:					
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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							Not Applicable
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							Yes
12. Is this a request in response to a Court, Federal, or State order?							No
13. Is this a request in response to a documented public health or safety condition?							No
14. Is this a request to improve or make repairs to extend the useful life of a building?							No
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							No
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No
17. Will any other department be required to provide assistance in order to complete the project?							Yes
18. If funded, will this project increase the operating expense for any other department?							No
19. If funded, will additional permanent staff be required?							No
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		Clarification of Questions: 11. This proposal would likely be eligible for Community Preservation funding. 17. The Town Manager and Town Counsel would need to be involved in discussions, deliberations and negotiations. At the time of this submission, a specific parcel is not known to be available for purchase, but the Select Board, Park and Recreation Commission and Conservation Commission have goals set that would require a purchase of land, i.e. a parcel next to a park to help provide parking.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition		\$1,000,000					
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$1,000,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Open Space Land	Fiscal Year:	2021

Supplemental Information

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. It is possible that some purchases would relate to easements, as opposed to full ownership of the land.

Unexpectedly, in FY2010, 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. A conservation restriction was purchased after the sale of the properties, as required under the CPA legislation.

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 for the boards. 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.

It is hoped that the cost of appraisal and purchase of conservation restriction can be included in the overall budget for the purchase.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Automated External Defibrillators (AED)				Fiscal Year: 2021			
Request Type:	Acquisition	Classification:	Equipment	Primary Purpose:	Public Safety	Status:	Existing-Revised Project
Department:	Police		Useful Life:	More than 9 Years		Project Cost:	\$32,885
How was the Project Cost Determined:		Industry References		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?							No
3. Does this project require any permitting by any Town or State agency?							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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							Not Applicable
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							No
12. Is this a request in response to a Court, Federal, or State order?							No
13. Is this a request in response to a documented public health or safety condition?							Yes
14. Is this a request to improve or make repairs to extend the useful life of a building?							No
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							No
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No
17. Will any other department be required to provide assistance in order to complete the project?							No
18. If funded, will this project increase the operating expense for any other department?							No
19. If funded, will additional permanent staff be required?							No
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		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 its 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 personnel arrive. We will be purchasing 11 AED at a cost of \$1,995.00 per unit. The additional \$10,940.00 is to purchase 11 hard shell, watertight carrying cases, 22 infant child pads and 22 batteries.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment		\$32,885					
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$32,885					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Automated External Defibrillators (AED)	Fiscal Year:	2021

Supplemental Information

On July 8, 2019 I received a letter from Stryker informing us that they have ended support for our current Lifepak 500 Defibrillator. This request was currently submitted for the fiscal 2023 capital plan. Due to the unforeseen changes to the support of this equipment and the potential impact to public safety I am requesting that this request be funded in 2021.

The AED's come with a 3 year warranty. It is our intention that after year three we would purchase maintenance program for all 11 AED at a cost of \$356.00 per unit or \$4272. This maintenance package would include all software and program upgrades as well as replacement of batteries and pads. This cost would be included in the operating budget on a year to year basis. This is the same program that the fire department currently utilizes.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Firearms						Fiscal Year: 2021	
Request Type:	Acquisition	Classification:	Equipment	Primary Purpose:	Public Safety	Status:	Existing-Revised Project
Department:	Police	Useful Life:	More than 9 Years	Project Cost:	\$33,000		
How was the Project Cost Determined:		Industry References		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters					Response		
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?					No		
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?					No		
3. Does this project require any permitting by any Town or State agency?					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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?					Not Applicable		
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?					No		
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?					No		
12. Is this a request in response to a Court, Federal, or State order?					No		
13. Is this a request in response to a documented public health or safety condition?					No		
14. Is this a request to improve or make repairs to extend the useful life of a building?					No		
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?					No		
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?					No		
17. Will any other department be required to provide assistance in order to complete the project?					No		
18. If funded, will this project increase the operating expense for any other department?					No		
19. If funded, will additional permanent staff be required?					No		
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		The current service weapon of the Police Department is a Smith and Wesson M&P 40 caliber and is 10 years old and is ending its useful lifecycle. 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 8 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 Smith and Wesson 9MM firearm. The cost includes the purchase of the new firearms. The other expense (\$14,000) is for the purchase of holsters and new 9MM ammunition for initial range qualifications and duty ammo. The department intends to purchase 60 weapons.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment		\$19,000					
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses		\$14,000					
TOTAL		\$33,000					

Capital Improvement Plan
January 2020

School Department Capital Project Request							
Project Title: School Copiers						Fiscal Year: 2021	
Request Type:	Acquisition	Classification:	Equipment	Primary Purpose:	Public Education	Status:	Existing-Revised Project
Department:	Needham Public Schools			Useful Life:	More than 5 Years	Project Cost:	\$62,420
How was the Project Cost Determined:		Industry References		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		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. For more information, please see below.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment		\$62,420					
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$62,420					

Capital Improvement Plan
January 2020

School Department Capital Project Request

Project Title: School Copiers

Fiscal Year: 2021

Supplemental Information

Currently the School Department owns 42 copy machines. The FY21-FY25 request replaces the following numbers of copy machines:

Fiscal Year	#of Copy Machines Replaced		
FY21 (Requested)	7	FY24 (Requested)	4
FY22 (Requested)	7	FY25 (Requested)	6
FY23 (Requested)	5		

Copier replacement is planned on a life-cycle basis, which projects when a copier should be replaced based on actual usage and the manufacturer's total estimated capacity. As a result, copiers which are heavily used, are replaced more frequently than copiers that are lightly used. The average life cycle is calculated at 7 years, although planned replacement ages range from 5 - 9 years, depending on use. (The baseline industry assumed lifespan for copiers is five years for a typical floor-standing copiers. At maximum, high-end copiers and floor standing models that are not used often may last up to 7-10 years.) It is important to replace these machines regularly, even if they have not yet reached maximum copy allowances, given the additional operating expense associated with servicing and maintaining older equipment, as well as the difficulty in obtaining replacement parts. This analysis also assumes that copiers are re-deployed around the District as needed, to better match projected usage with equipment capacity.

The request is revised from the prior year submission to include:

* A new, fifth year replacement cycle (of \$85,920 for six copiers.)

* The addition of four copiers in FY21-24, based on the updated life cycle replacement cycle calculation, for a total of \$59,680.

Building	Location	Make	Model	Purchase Year	Age At Repl	FY20	FY21	FY22	FY23	FY24	FY25	FY20	FY21	FY22	FY23	FY24	FY25
Administration	2nd Floor	Konica	KM 658E	2018	6.00	21%	32%	43%	54%	64%	11%	-	-	-	-	12,740	-
Administration	Production Center	Konica	KM 1100	2020	6.00	REPL	10%	20%	29%	39%	49%	23,084	-	-	-	-	-
Administration	1st Floor	Konica	KM 454E	2017	6.00	49%	64%	79%	94%	15%	30%	-	-	-	7,420	-	-
Administration	Production Center	XEROX	D125	2012	6.00	36%	54%	71%	89%	107%	18%	-	-	-	-	44,700	-
Broadmeadow	Teachers' Room	Konica	KM 808	2020	5.00	REPL	20%	39%	59%	79%	98%	11,950	-	-	-	-	15,260
Broadmeadow	Main Office	Konica	KM 654E	2014	8.00	49%	58%	67%	9%	18%	27%	-	-	11,550	-	-	-
NHS	Main Office	Konica	KM 364E	2015	6.00	156%	167%	11%	22%	33%	44%	-	4,910	-	-	-	-
Broadmeadow	ETC	Konica	KM 227	2020	6.00	REPL	13%	26%	40%	53%	66%	3,500	-	-	-	-	-
NHS	Athletics	Konica	KM 454E	2016	6.00	67%	84%	100%	16%	33%	49%	-	-	7,070	-	-	-
NHS	Math/Sci Rm 205	Konica	KM 654E	2017	7.00	42%	58%	73%	89%	105%	16%	-	-	-	-	12,740	-
NHS	World Lang 704	Konica	KM 654E	2014	7.00	116%	133%	17%	35%	52%	69%	-	11,000	-	-	-	-
NHS	Health Office 607	Konica	KM 227	2020	7.00	REPL	5%	3%	5%	8%	11%	4,249	-	-	-	-	-
NHS	Music	Konica	KM 654E	2016	9.00	26%	32%	38%	44%	50%	56%	-	-	-	-	-	13,380
NHS	Guidance	Konica	KM 364E	2014	8.00	67%	75%	83%	32%	40%	48%	-	-	5,160	-	-	-
NHS	Media Center	Konica	KM 454E	2014	8.00	75%	78%	81%	3%	6%	9%	-	-	7,070	-	-	-
NHS	Sped 801	Konica	KM 458E	2018	8.00	17%	25%	34%	42%	51%	59%	-	-	-	-	-	-
NHS	SS/English 703	Konica	KM 754E	2014	7.00	107%	118%	33%	44%	55%	66%	-	12,550	-	-	-	-
NHS	Eng/SS	Konica	KM 808	2020	5.00	REPL	26%	53%	79%	106%	132%	11,950	-	-	-	-	15,260
NHS	Grade Level	Konica	KM 368E	2020	7.00	REPL	13%	27%	40%	53%	67%	4,675	-	-	-	-	-
NHS	Math/Sci	Konica	KM 808	2020	5.00	REPL	31%	63%	94%	125%	157%	11,950	-	-	-	-	15,260
Williams	Main Office	Konica	KM 458E	2019	7.00	REPL	8%	15%	23%	31%	39%	-	-	-	-	-	-

Capital Improvement Plan
January 2020

School Department Capital Project Request

Project Title:												Fiscal Year:					
School Copiers												2021					
Williams	Downstairs	Konica	KM 458E	2019	7.00	REPL	10%	19%	29%	39%	48%	-	-	-	-	-	-
Williams	Main Office	Konica	KM 658E	2019	5.00	REPL	24%	48%	73%	97%	121%	-	-	-	-	-	13,380
Mitchell	Back Hallway	Konica	KM 654E	2017	7.00	36%	49%	63%	76%	90%	14%	-	-	-	-	12,740	-
Mitchell	Front Office	Konica	KM 654E	2014	7.00	128%	146%	18%	36%	54%	72%	-	11,000	-	-	-	-
Newman	Front Office	Konica	KM 458E	2020	6.00	REPL	15%	30%	46%	61%	76%	6,410	-	-	-	-	-
Newman	Hall Outside Office	Konica	KM 654E	2016	7.00	61%	75%	89%	104%	14%	29%	-	-	-	12,130	-	-
Newman	Hallway Near Café	Konica	KM 654E	2017	7.00	44%	61%	79%	96%	17%	35%	-	-	-	12,130	-	-
Newman	Down Stairs Hall	Konica	KM 558E	2018	7.00	30%	45%	59%	74%	89%	104%	-	-	-	-	-	13,380
Science Center	Science Center	Konica	KM 227	2020	7.00	REPL	5%	10%	14%	19%	24%	3,500	-	-	-	-	-
Pollard	8th Grade Hallway	Konica	KM 654E	2015	7.00	88%	108%	128%	20%	40%	60%	-	-	11,550	-	-	-
Pollard	Modulars	Konica	KM 754E	2014	8.00	46%	54%	62%	8%	16%	24%	-	-	13,180	-	-	-
Pollard	Main Office	Konica	KM 808	2020	7.00	REPL	17%	34%	51%	67%	84%	11,950	-	-	-	-	-
Pollard	7th Grade Work Area	Konica	KM 654E	2014	8.00	93%	103%	113%	10%	20%	30%	-	-	11,550	-	-	-
Pollard	Teachers Lounge	Konica	KM 454E	2017	5.00	75%	102%	26%	53%	79%	105%	-	6,730	-	-	-	-
High Rock	Room 207	Konica	KM 654E	2016	7.00	47%	58%	69%	80%	11%	22%	-	-	-	12,130	-	-
High Rock	Main Office	Konica	KM 754E	2014	7.00	104%	119%	16%	31%	47%	62%	-	12,550	-	-	-	-
Eliot	Main Office	Konica	KM 754E	2014	9.00	69%	77%	85%	93%	8%	16%	-	-	-	13,840	-	-
Eliot	Room 151	Konica	KM 658E	2018	8.00	17%	25%	34%	42%	50%	59%	-	-	-	-	-	-
Eliot	Room 210	Konica	KM 458E	2018	8.00	27%	40%	54%	67%	81%	94%	-	-	-	-	-	-
NCE Day Care	Main Office	XEROX	WC3550 X	2012	9.00	50%	58%	8%	16%	24%	32%	-	3,680	-	-	-	-
Administration	Production/Color	Konica	KM C3070L	2020	6.00	REPL	11%	21%	32%	42%	53%	36,772	-	-	-	-	-
Average Age Year of Replacement / Count of Machines						Average	6.88	11	7	7	5	4	6				
Totals												129,990	62,420	67,130	57,650	82,920	85,920

Capital Improvement Plan
January 2020

School Department Capital Project Request							
Project Title: School New and Replacement Furniture				Fiscal Year: 2021			
Request Type:	Acquisition	Classification:	Equipment	Primary Purpose:	Public Education	Status:	Existing Project
Department:	Needham Public Schools			Useful Life:	More than 20 Years	Project Cost:	\$35,000
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?							No
3. Does this project require any permitting by any Town or State agency?							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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							No
12. Is this a request in response to a Court, Federal, or State order?							No
13. Is this a request in response to a documented public health or safety condition?							No
14. Is this a request to improve or make repairs to extend the useful life of a building?							No
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							No
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No
17. Will any other department be required to provide assistance in order to complete the project?							No
18. If funded, will this project increase the operating expense for any other department?							No
19. If funded, will additional permanent staff be required?							No
Total New FTE's:		<u>Project Description and Considerations</u>					
Project Budget Elements		Project Budget		In FY05 Town Meeting approved funding of \$20,500 to begin the replacement of furniture in poor and fair condition throughout the School Department. By FY15, all furniture in 'poor' condition was replaced in the schools. The FY21-FY25 funding request will continue with the replacement of furniture in 'fair' condition at Pollard and provide funding for new classroom furniture as needed. A breakdown of the funding request is found below: FY21: \$35,000 * \$10,000 to conclude the replacement of furniture at Pollard Middle School in 'fair' condition * \$25,000 to purchase new classroom furniture as needed for new enrollment or replacement purposes. FY22 - FY25: \$25,000/year * \$25,000 to purchase new classroom furniture as needed for new enrollment or replacement purposes.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment		\$35,000					
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$35,000					

Capital Improvement Plan
January 2020

School Department Capital Project Request

Project Title: School New and Replacement Furniture

Fiscal Year: 2021

Supplemental Information

The anticipated furniture replacement schedule is depicted below:

Funding Plan	Request FY21	Request FY22	Request FY23	Request FY24	Request FY25	Total
Pollard	\$10,000					\$10,000
New Classrooms	<u>\$25,000</u>	<u>\$25,000</u>	<u>\$25,000</u>	<u>\$25,000</u>	<u>\$25,000</u>	<u>\$125,000</u>
Total	\$35,000	\$25,000	\$25,000	\$25,000	\$25,000	\$135,000

Capital Improvement Plan
January 2020

School Department Capital Project Request							
Project Title: School Department Technology Request						Fiscal Year: 2021	
Request Type:	Acquisition	Classification:	Technology	Primary Purpose:	Public Education	Status:	Existing-Revised Project
Department:	Needham Public Schools			Useful Life:	More than 5 Years	Project Cost:	\$586,575
How was the Project Cost Determined:		Industry References		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Not Applicable	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		<u>Project Description and Considerations</u>			
Project Budget Elements		Project Budget		The FY21-25 CIP request funds the purchase of School Department technology, including desktop computers, printers, classroom audio visual devices, specialized instructional labs, projectors, video displays, security cameras and electronic door access controllers. The request also incorporates funding for school technology infrastructure, which consists of servers, network hardware, wireless infrastructure, data cabling and access points. This request reflects the School Department's classroom technology standard and the decision in FY17 to move devices with a lifespan of less than five years (Digital Learning Devices, or DLDs, and staff laptops) to the operating budget. A chart summarizing the five-year (FY21-25) request is included below. See below for additional information.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology		\$586,575					
Other Expenses							
TOTAL		\$586,575					

Capital Improvement Plan
January 2020

School Department Capital Project Request			
Project Title:	School Department Technology Request	Fiscal Year:	2021

Supplemental Information

The FY21-25 Capital Improvement Plan (CIP) for school technology totals \$2,656,025 and includes \$2,091,025 for school hardware replacement and \$565,000 for school technology infrastructure. The request is similar to the prior submission, with the following exceptions:

- * \$651,550 in new, fifth-year (FY25) technology purchases, including \$538,550 for hardware replacement and \$113,000 for technology infrastructure.
- * The addition of \$120,000 to replace paging clocks/ aiphone technology in the first four years of the plan (FY21-24.) (The total request across all five years is \$150,000.)
- * A \$60,000 reduction to the cost of NHS TV studio equipment replacement in the first four years of the plan (FY21-24), reflecting cost savings realized from in-house versus outsourced construction and project coordination with Needham Channel.

The FY21 request is for \$586,575, an increase of \$30,000 from the FY21 projection included in the FY20-24 CIP. The \$586,575 total request includes \$473,575 for hardware and \$113,000 for infrastructure replacement. The FY21 request is unchanged from the prior year, with the exception of the following:

- * The addition of \$30,000 to replace paging clocks/ aiphone technology.

The FY22-25 CIP increases \$761,550 over the prior CIP, to add a new fifth year to the plan (@ \$651,550) and provide \$110,000 in net new funding during the first four years for the following items:

- * The addition of \$90,000 to replace paging clocks/ aiphone technology in FY22-24, which is offset by a \$60,000 reduction in the cost of NHS TV studio equipment replacement, for a net additional expense of \$30,000.
- * \$32,000 in additional funds to support replacement of the Pollard Lecture Hall projector in FY24.
- * \$48,000 in additional funds to support classroom AV/projector replacement in FY24 at the Mitchell (\$18,000) and NHS (\$30,000.)

Parameters Addressed:

Technology: The School Technology department supports this request.

A detailed breakout of changes from the prior year's FY21-24 request is highlighted below.

Summary	FY21	FY21	FY21	FY22	FY22	FY22	FY23	FY23	FY23	FY24	FY24	FY24	FY25	FY21-25
All Hardware (Including New Requests)	Prior	New	Change	Prior	New	Change	Prior	New	Change	Prior	New	Change	New	Total
Lab Computers	202,500	202,500	-	162,000	162,000	-	162,000	162,000	-	40,500	40,500	-	46,000	613,000
Science Lab Computers	-	-	-	-	-	-	-	-	-	-	-	-	54,000	54,000
TV Studio Computers	-	-	-	-	-	-	36,000	36,000	-	-	-	-	-	36,000
Graphics Lab Computers	-	-	-	-	-	-	-	-	-	44,000	44,000	-	-	44,000
Desktop Computers	106,500	106,500	-	21,000	21,000	-	21,000	21,000	-	21,000	21,000	-	116,000	285,500
Printers	20,075	20,075	-	37,650	37,650	-	-	-	-	-	-	-	22,550	80,275
Classroom AV/ Projection	80,000	80,000	-	110,000	110,000	-	90,000	90,000	-	80,000	128,000	48,000	240,000	648,000
Gym/ Performance Center Projection /Screen	-	-	-	-	-	-	-	-	-	18,000	50,000	32,000	-	50,000
NHS TV Studio	30,000	30,000	-	30,000	-	(30,000)	-	-	-	30,000	-	(30,000)	30,000	60,000
Paging Clocks Aiphone	-	30,000	30,000	-	30,000	30,000	-	30,000	30,000	-	30,000	30,000	30,000	150,000
Security Cameras	4,500	4,500	-	16,500	16,500	-	-	-	-	49,250	49,250	-	-	70,250
Subtotal	443,575	473,575	30,000	377,150	377,150	-	309,000	339,000	30,000	282,750	362,750	80,000	538,550	2,091,025

Capital Improvement Plan
January 2020

School Department Capital Project Request														
Project Title: School Department Technology Request												Fiscal Year:		
Summary	FY21	FY21	FY21	FY22	FY22	FY22	FY23	FY23	FY23	FY24	FY24	FY24	FY25	FY21-25
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	FY21	FY21	FY21	FY22	FY22	FY22	FY23	FY23	FY23	FY24	FY24	FY24	FY25	FY21-25
Grand Total	Prior	New	Change	Prior	New	Change	Prior	New	Change	Prior	New	Change	New	Total
Hardware	443,575	473,575	30,000	377,150	377,150	-	309,000	339,000	30,000	282,750	362,750	80,000	538,550	2,091,025
Infrastructure	113,000	113,000	-	113,000	113,000	-	113,000	113,000	-	113,000	113,000	-	113,000	565,000
Grand Total	556,575	586,575	30,000	490,150	490,150	-	422,000	452,000	30,000	395,750	475,750	80,000	651,550	2,656,025

Capital Improvement Plan
January 2020

School Department Capital Project Request							
Project Title: Needs Assessment of Pollard, Newman and NHS Auditorium Theatrical Sound and Lighting Systems					Fiscal Year: 2021		
Request Type:	Design/Engineering	Classification:	Equipment	Primary Purpose:	Public Education	Status:	Resubmitted Project
Department:	Needham Public Schools			Useful Life:	More than 9 Years	Project Cost:	\$60,000
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Not Applicable	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						Yes	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		This project is to conduct a needs assessment/ feasibility study of upgrading the theatrical sound and lighting systems in the Pollard, Newman and Needham High School (NHS) Auditoriums. These auditoriums are venues for student and community group productions. The theatrical equipment currently installed in these venues, however, is old and not adequate for contemporary musical or theatrical productions. Although some issues are unique to particular venues, some common deficiencies in the audio systems include: * speakers, which are poorly placed, insufficient in number and/or non-functioning, thereby impairing the audience's ability to hear what is happening clearly on stage from all seats. * sound boards, which are old (analog), partially non-functioning and/or not at a standard that is necessary for a modern musical or theatrical production.			
Planning/Feasibility		\$60,000					
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$60,000					

Capital Improvement Plan
January 2020

School Department Capital Project Request

Project Title: Needs Assessment of Pollard, Newman and NHS Auditorium Theatrical Sound and Lighting Systems

Fiscal Year:

2021

Supplemental Information

- * Amplification equipment (such as wireless receivers and microphones), which are insufficient in number and/or broken.
- * The lighting systems also include light fixtures that are partially non-functioning, and uncoordinated with sound delivery.

Although the need and vision for these spaces has not yet been fully assessed, school parents and community groups already have engaged in fundraising for equipment upgrades. Pollard parents have written a Needham Education Foundation (NEF) grant and received community donations to obtain funding for lighting system upgrades in the Pollard Auditorium, the component parts of which are expected to cost approximately \$15,000. Other groups have discussed fundraising for the NHS Auditorium as well.

This study is intended to guide and direct future fundraising by community partners and develop a capital plan and budget for these spaces.

Parameters:

Technology: The School Technology Department supports this request.

Departmental Assistance: Public Facilities, for bidding.

Capital Improvement Plan
January 2020

School Department Capital Project Request							
Project Title: Broadmeadow School Technology Room Conversion						Fiscal Year: 2021	
Request Type:	Construction	Classification:	Building	Primary Purpose:	Public Education	Status:	Existing-Revised Project
Department:	Needham Public Schools			Useful Life:	More than 20 Years	Project Cost:	\$213,100
How was the Project Cost Determined:		Hired Consultant		Budget Impact:		Negligible impact on the annual operating expenses less than \$5,000	
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						Yes	
4. If 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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Not Applicable	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						Yes	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		The School Committee implemented Full-Day Kindergarten (FDK) in September, 2019. Based on a feasibility study conducted by Dore & Whittier Architects (February 2018), several modifications to Needham buildings are needed to accommodate the projected number of classrooms needed over the next five years resulting from Full Day Kindergarten and projected enrollment growth. These modifications include the conversion of a technology lab at the Broadmeadow School to a classroom, to open during School Year 2022/23. This project provides funding to convert the existing technology lab at Broadmeadow Elementary School to a classroom. Project costs are based on a preliminary project budget prepared February 2018 by Dore & Whittier, updated to reflect the following cost escalators: 10%/year (FY19-20), and 8%/year thereafter. See below for additional information.			
Planning/Feasibility		\$0					
Design/Engineering		\$33,900					
Land/ROW Acquisition							
Site Preparation							
Construction		\$128,400					
Construction Management		\$8,500					
Equipment							
Furniture, Fixtures, and Equipment		\$42,300					
Technology							
Other Expenses							
TOTAL		\$213,100					

Capital Improvement Plan
January 2020

School Department Capital Project Request

Project Title: Broadmeadow School Technology Room Conversion

Fiscal Year:

2021

Supplemental Information

Preliminary Project Schedule:

Funding for Detailed Design & Construction FY21 - Oct '20 STM

Detailed Design & Bidding (FY21) - Nov '20 - May '21

Construction: (FY23) - June '22 - Aug '22

New Classroom Opens (FY23) - Sept '22

Parameters Addressed:

Permitting: As required by Town Boards.

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

Building Improvements: The Public Facilities Department supports this request.

Other Departmental Assistance: Public Facilities, for bidding and project management.

This project has been revised to advance the funding date to October '20 STM (FY21), so that the Eliot and Broadmeadow technology room conversion projects can be designed and bid together, for cost savings and project efficiencies.

Project Cost Summary

Broadmeadow School Technology Room Conversion

900 sf		Feasibility	Construction*	A/E	FF&E	Constr Mgnt	Total	Cost/SF
FY18 Project Cost (D&W)		-	91,000	24,000	30,000	6,000	151,000	167.78
TOTAL		-	91,000	24,000	30,000	6,000	151,000	167.78
		0%	60%	16%	20%	4%	100%	
10.00%	FY19 Cost Multiplier @ 5%	-	100,100	26,400	33,000	6,600	166,100	184.56
10.00%	FY20 Cost Multiplier @ 5%	-	110,110	29,040	36,300	7,260	182,710	203.01
8.00%	FY21 Cost Multiplier @ 5%	-	118,919	31,363	39,204	7,841	197,327	219.25
8.00%	FY22 Cost Multiplier @ 5%	-	128,432	33,872	42,340	8,468	213,113	236.79
4 Years	TOTAL PROJECT COST	-	128,432	33,872	42,340	8,468	213,113	236.79
	TOTAL COST (ROUNDED)	-	128,400	33,900	42,300	8,500	213,100	236.78
		FY20	FY21	FY22	Total			
Feasibility		-			-			
Arch/Engineering			33,900		33,900			
Construction			128,400		128,400			
Construction Management			8,500		8,500			
FF&E		0	42,300	-	42,300			
		-	213,100	-	213,100			

Capital Improvement Plan
January 2020

School Department Capital Project Request						
Project Title: Eliot School Technology Room Conversion					Fiscal Year: 2021	
Request Type:	Construction	Classification:	Building	Primary Purpose:	Public Education	Status: Resubmitted Project
Department:	Needham Public Schools		Useful Life:	More than 20 Years	Project Cost:	\$179,300
How was the Project Cost Determined:		Hired Consultant		Budget Impact:		Negligible impact on the annual operating expenses less than \$5,000
Parameters						Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No
3. Does this project require any permitting by any Town or State agency?						Yes
4. If 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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Not Applicable
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No
12. Is this a request in response to a Court, Federal, or State order?						No
13. Is this a request in response to a documented public health or safety condition?						No
14. Is this a request to improve or make repairs to extend the useful life of a building?						No
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No
17. Will any other department be required to provide assistance in order to complete the project?						Yes
18. If funded, will this project increase the operating expense for any other department?						No
19. If funded, will additional permanent staff be required?						No
Total New FTE's:		0		Project Description and Considerations		
Project Budget Elements		Project Budget		The School Committee implemented Full-Day Kindergarten (FDK) in September, 2019. Based on a feasibility study conducted by Dore & Whittier Architects (February 2018), several modifications to Needham buildings are needed to accommodate the projected number of classrooms needed over the next five years resulting from Full Day Kindergarten and projected enrollment growth. These modifications include the conversion of a technology lab at the Eliot School to a classroom, to open during School Year 2021/22. This project provides funding to convert the existing technology lab at Eliot Elementary School to a classroom. Project costs are based on a preliminary project budget prepared February 2018 by Dore & Whittier, updated to reflect the following cost escalators: 10%/year (FY19-20), and 8%/year thereafter. See below for additional information.		
Planning/Feasibility		\$0				
Design/Engineering		\$28,500				
Land/ROW Acquisition						
Site Preparation						
Construction		\$108,100				
Construction Management		\$7,100				
Equipment						
Furniture, Fixtures, and Equipment		\$35,600				
Technology						
Other Expenses						
TOTAL			\$179,300			

Capital Improvement Plan
January 2020

School Department Capital Project Request			
Project Title:	Eliot School Technology Room Conversion	Fiscal Year:	2021

Supplemental Information

Preliminary Project Schedule:

Funding for Detailed Design & Construction FY21 - (Oct '20 STM)
 Detailed Design & Bidding (FY21) - Nov '20 - May '21
 Construction (FY22) - June '21 - Aug '21
 New Classroom Opens (FY22) - Sept '21

Parameters Addressed:

Permitting: As required by Town Boards.
 Technology: The School Instructional Technology Department is in support of this request. The estimated cost includes an FF&E budget for this project, including classroom technology.
 Building Improvements: The Public Facilities Department supports this request.
 Other Departmental Assistance: Public Facilities, for bidding and project management.

Project Budget Detail:

Eliot School Technology Room Conversion

900 sf	Feasibility	Construction*	A/E	FF&E	Constr Mgmt	Total	\$/ sf
FY18 Project Cost (D&W)	-	91,000	24,000	30,000	6,000	151,000	167.78
TOTAL	-	91,000	24,000	30,000	6,000	151,000	167.78
	0%	60%	16%	20%	4%	100%	
10.00% FY19 Cost Multiplier @ 5%	-	91,000	24,000	30,000	6,000	151,000	167.78
10.00% FY20 Cost Multiplier @ 5%	-	100,100	26,400	33,000	6,600	166,100	184.56
8.00% FY21 Cost Multiplier @ 5%	-	108,108	28,512	35,640	7,128	179,388	199.32
3 Years TOTAL PROJECT COST	-	108,108	28,512	35,640	7,128	179,388	199.32
TOTAL COST (ROUNDED)	-	108,100	28,500	35,600	7,100	179,400	199.33

* Excludes modular temporary classrooms

	FY20	FY21	Total
Feasibility	-	-	-
Arch/Engineering		28,500	28,500
Construction		108,100	108,100
Construction Management		7,100	7,100
FF&E	0	35,600	35,600
Total	-	179,300	179,300

Capital Improvement Plan
January 2020

School Department Capital Project Request							
Project Title: Renovate Hillside Elementary School as Swing Space for School Construction Projects					Fiscal Year: 2021		
Request Type:	Construction	Classification:	Building	Primary Purpose:	Public Education	Status:	Existing-Revised Project
Department:	Needham Public Schools		Useful Life:	More than 30 Years		Project Cost:	\$100,000
How was the Project Cost Determined:		Hired Consultant		Budget Impact:	May increase annual operating expenses by more than \$100,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Not Applicable	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						Yes	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						Yes	
18. If funded, will this project increase the operating expense for any other department?						Yes	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		This is a project to modernize the existing Hillside School for use as swing space for future school capital projects, after the new Sunita Williams Elementary School opens in September 2029 (FY20.) A potential schedule for the use of this facility as swing space is: Use A Emery Grover Renovation (June '23 - July '25), Use B Mitchell Renovation (Aug '25 - July '27), and Use C Pollard Renovation (Aug '29 - Aug '30.) This schedule assumes that modernization would occur in multiple phases, with minor interior modifications occurring for the Emery Grover occupation, and more substantial modifications occurring to accommodate the Mitchell and Pollard School populations. See below for additional information.			
Planning/Feasibility		\$100,000					
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$100,000					

Capital Improvement Plan
January 2020

School Department Capital Project Request

Project Title: Renovate Hillside Elementary School as Swing Space for School Construction Projects

Fiscal Year: 2021

Supplemental Information

Given the long time-line and design variables associated with this project, the potential project schedule below reflects interim uses A (Emery Grover) and B (Mitchell School) only. The overall project cost also is a placeholder, based on the "Option A" 'Base Repair' project estimate developed by Dore & Whittier Architects in 2014, which updates all major building systems to comply with current codes and regulations. The scope, timeline and budget of a final project would depend on the outcome of the feasibility studies below, as well as the ongoing School Master Plan, and could take various forms. (For example, an alternate project could tear down the facility and construct a modular classrooms campus.) The scope of the 'Option A' base repair budget does NOT include adding the modular classrooms that would be needed to accommodate the Mitchell School population or a full grade of Pollard students. The Feasibility Study scope should include a comparative analysis of the relative cost effectiveness of an alternate project to demolish the school and create modular swing space on this site, should reflect the smallest renovation scope possible, and should include the needed modular component. This project reflects the timeline below and the following cost escalators: 6%/year (FY14-FY16), 5.0%/year (FY17-18), 10.0%/year (FY19-20), and 8%/year thereafter.

This project is revised from the previous request to push the project time table back one year, to reflect the anticipated completion of the School Master Plan study in June 2020, the final recommendations from which will shape the final scope and budget for this project. According to the PPBC, it is possible that the final design budget may 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.

Potential Schedule

Feasibility Funding for Interim Uses A & B (FY21) - May '20 ATM
Funding for Detailed Design (FY22) - May '21 ATM
Design Bidding (FY21-22) - May '21 - Aug '21
Schematic Design for Interim Uses (Phases A, B, C) (FY22) - Sept '21 - Mar '22
Funding for Construction Interim Use A (FY23) - May '22 ATM
Detailed Design & Bidding Phase A (FY22-23) - May '22 - Oct '22
Interim Use - School Administration Construction/Repairs (FY23) - Nov '22 - May '23
Move School Administration to Hillside (FY23-24) - June '23 - July '23
School Administration Occupies Hillside (FY24-25) - Aug '23 - June '25

Funding for Construction Interim Use B Exterior Modulares (FY24) - Oct '23 STM
Design Development Exterior Modulares (FY24) - Jan '24 - June '24
Construction Documents Exterior Modulares (FY25) - July '24 - Oct '24
Bidding (FY25) - Nov '24 - Dec '24
Exterior Construction (FY25-26) - Jan '25 - Aug '25
Modular Reconstruction & Interior Renovation (FY25-26) - June '25 - Aug '25
Feasibility Funding for Interim Use C (FY27) - May '26 ATM
Mitchell School Occupies Hillside (FY26-27) - Aug '25 - July '27
Remaining Schedule & Budget to be Determined by Feasibility Study

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 an FF&E budget for this new facility, including technology.

Building Improvements: The PPBC supports this request.

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

Extend Useful Life: See above narrative.

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

Operating Budget Increase for Another Department: See above.

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

Capital Improvement Plan
January 2020

School Department Capital Project Request

Project Title: Renovate Hillside Elementary School as Swing Space for School Construction Projects

Fiscal Year: 2021

Project Budget:

**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)		225,000	8,835,814	1,649,200	1,032,000	412,300	12,154,314	\$270.07
TOTAL		225,000	8,835,814	1,649,200	1,032,000	412,300	12,154,314	\$270.07
		2%	73%	14%	8%	3%	100%	
6.00%	FY15 Cost Multiplier		9,365,963	1,748,152	1,093,920	437,038	12,645,073	\$280.97
6.00%	FY16 Cost Multiplier		9,927,921	1,853,041	1,159,555	463,260	13,403,777	\$297.83
5.00%	FY17 Cost Multiplier		10,424,317	1,945,693	1,217,533	486,423	14,073,966	\$312.72
5.00%	FY18 Cost Multiplier		10,945,532	2,042,978	1,278,410	510,744	14,777,664	\$328.36
10.00%	FY19 Cost Multiplier		12,040,086	2,247,276	1,406,251	561,819	16,255,431	\$361.19
10.00%	FY20 Cost Multiplier	100,000	13,244,094	2,472,003	1,546,876	618,001	17,980,974	\$399.53
8.00%	FY21 Cost Multiplier	100,000	14,303,622	2,669,763	1,670,626	667,441	19,411,452	\$431.32
8.00%	FY22 Cost Multiplier	100,000	15,447,912	2,883,345	1,804,276	720,836	20,956,368	\$465.65
8.00%	FY23 Cost Multiplier	100,000	16,683,745	3,114,012	1,948,618	778,503	22,624,877	\$502.72
8.00%	FY24 Cost Multiplier	100,000	18,018,444	3,363,133	2,104,507	840,783	24,426,868	\$542.76
8.00%	FY25 Cost Multiplier	100,000	19,459,920	3,632,184	2,272,868	908,046	26,373,017	\$586.00
8.00%	FY26 Cost Multiplier	225,000	21,016,713	3,922,758	2,454,697	980,690	28,599,858	\$635.48
8.00%	FY27 Cost Multiplier	225,000	22,698,050	4,236,579	2,651,073	1,059,145	30,869,847	\$685.92
9 Years	TOTAL PROJECT COST	225,000	22,698,050	4,236,579	2,651,073	1,059,145	30,869,847	\$685.92
	TOTAL COST (ROUNDED)	225,000	22,698,100	4,236,600	2,651,100	1,059,100	30,869,800	\$685.92

* Excludes modular temporary classrooms

Square Footage 45,005

	FY21	FY22	FY24	FY7	Total
Feasibility	100,000			125,000	225,000
Arch/Engineering		4,236,600			4,236,600
Construction			22,698,100		22,698,100
Construction Management			1,059,100		1,059,100
FF&E	0	0	2,651,100	0	2,651,100
Total	100,000	4,236,600	26,408,300	125,000	30,869,900

Capital Improvement Plan
January 2020

School Department Capital Project Request							
Project Title: Placeholder Project Feasibility Recommended by School Master Plan						Fiscal Year: 2021	
Request Type:	Design/Engineering	Classification:	Building	Primary Purpose:	Public Education	Status:	New Request
Department:	Needham Public Schools			Useful Life:	More than 30 Years	Project Cost:	\$650,000
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?							No
3. Does this project require any permitting by any Town or State agency?							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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							Not Applicable
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							No
12. Is this a request in response to a Court, Federal, or State order?							No
13. Is this a request in response to a documented public health or safety condition?							No
14. Is this a request to improve or make repairs to extend the useful life of a building?							No
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							No
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No
17. Will any other department be required to provide assistance in order to complete the project?							Yes
18. If funded, will this project increase the operating expense for any other department?							No
19. If funded, will additional permanent staff be required?							No
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		This project is to provide a placeholder budget for feasibility design in FY21, to implement the recommendations of the ongoing School Master Plan study. The School Master Plan is set to conclude in April - June, 2020 and will develop recommendations for long-range school capital plans under different enrollment scenarios/ trajectories and the practical considerations of aging buildings. See below for more information.			
Planning/Feasibility		\$650,000					
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$650,000					

Capital Improvement Plan
January 2020

School Department Capital Project Request

Project Title: Placeholder Project Feasibility Recommended by School Master Plan

Fiscal Year:

2021

Supplemental Information

Capital planning for the School Department has grown increasingly complex, given the pressing needs of accommodating Full-Day Kindergarten, providing capacity for a growing enrollment and repairing and renovating aging facilities. These imminent and pressing needs have made it extremely difficult to prioritize from among the capital needs on the planning horizon: including a Mitchell Elementary School renovation to address building age/deficiencies; a recommended project to install up to six modular classrooms at the Eliot Elementary School to accommodate projected enrollment growth in that District; a small-scale retrofit to the Broadmeadow and Eliot Elementary Schools to provide needed capacity for Full Day Kindergarten, and a Pollard Renovation project to replace the modular classrooms (now at the end of their useful life), modernize spaces and provide enrollment capacity. In addition, the need to provide swing space for these projects and the potential use of the existing Hillside Elementary School on Glen Gary Road to meet this need, present intermediate scheduling and planning challenges. (These challenges are made more acute by the need to schedule around the planned use of this space as temporary headquarters for police/fire during renovation of their facility, and the fact that different retrofits will likely be needed to accommodate each use.) Meeting these various needs within available resources and reasonable timeframes will require the School Department to carefully consider all of the possibilities and options for prioritizing and scheduling building projects going forward.

The School Master Plan study will develop recommendations for long-range school capital plans under different enrollment scenarios/ trajectories and the practical considerations of aging buildings. Potential recommendations could involve other buildings and/or non-building solutions like redistricting.

The placeholder design will allow the recommendations from this study to be implemented as soon as the study is completed, to address the most urgent need identified in the study.

Parameters Addressed:

Other Departmental Assistance: PPBC Project Management

Capital Improvement Plan
January 2020

School Department Capital Project Request							
Project Title: School Copiers						Fiscal Year: 2022	
Request Type:	Acquisition	Classification:	Equipment	Primary Purpose:	Public Education	Status:	Existing-Revised Project
Department:	Needham Public Schools			Useful Life:	More than 5 Years	Project Cost:	\$67,130
How was the Project Cost Determined:		Industry References		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		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. For more information, please see below.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment		\$67,130					
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$67,130					

Capital Improvement Plan
January 2020

School Department Capital Project Request

Project Title: School Copiers

Fiscal Year: 2022

Supplemental Information

Currently the School Department owns 42 copy machines. The FY21-FY25 request replaces the following numbers of copy machines:

Fiscal Year	#of Copy Machines Replaced		
FY21 (Requested)	7	FY24 (Requested)	4
FY22 (Requested)	7	FY25 (Requested)	6
FY23 (Requested)	5		

Copier replacement is planned on a life-cycle basis, which projects when a copier should be replaced based on actual usage and the manufacturer's total estimated capacity. As a result, copiers which are heavily used, are replaced more frequently than copiers that are lightly used. The average life cycle is calculated at 7 years, although planned replacement ages range from 5 - 9 years, depending on use. (The baseline industry assumed lifespan for copiers is five years for a typical floor-standing copiers. At maximum, high-end copiers and floor standing models that are not used often may last up to 7-10 years.) It is important to replace these machines regularly, even if they have not yet reached maximum copy allowances, given the additional operating expense associated with servicing and maintaining older equipment, as well as the difficulty in obtaining replacement parts. This analysis also assumes that copiers are re-deployed around the District as needed, to better match projected usage with equipment capacity.

The request is revised from the prior year submission to include:

* A new, fifth year replacement cycle (of \$85,920 for six copiers.)

* The addition of four copiers in FY21-24, based on the updated life cycle replacement cycle calculation, for a total of \$59,680.

Building	Location	Make	Model	Purchase Year	Age At Repl	FY20	FY21	FY22	FY23	FY24	FY25	FY20	FY21	FY22	FY23	FY24	FY25
Administration	2nd Floor	Konica	KM 658E	2018	6.00	21%	32%	43%	54%	64%	11%	-	-	-	-	12,740	-
Administration	Production Center	Konica	KM 1100	2020	6.00	REPL	10%	20%	29%	39%	49%	23,084	-	-	-	-	-
Administration	1st Floor	Konica	KM 454E	2017	6.00	49%	64%	79%	94%	15%	30%	-	-	-	7,420	-	-
Administration	Production Center	XEROX	D125	2012	6.00	36%	54%	71%	89%	107%	18%	-	-	-	-	44,700	-
Broadmeadow	Teachers' Room	Konica	KM 808	2020	5.00	REPL	20%	39%	59%	79%	98%	11,950	-	-	-	-	15,260
Broadmeadow	Main Office	Konica	KM 654E	2014	8.00	49%	58%	67%	9%	18%	27%	-	-	11,550	-	-	-
NHS	Main Office	Konica	KM 364E	2015	6.00	156%	167%	11%	22%	33%	44%	-	4,910	-	-	-	-
Broadmeadow	ETC	Konica	KM 227	2020	6.00	REPL	13%	26%	40%	53%	66%	3,500	-	-	-	-	-
NHS	Athletics	Konica	KM 454E	2016	6.00	67%	84%	100%	16%	33%	49%	-	-	7,070	-	-	-
NHS	Math/Sci Rm 205	Konica	KM 654E	2017	7.00	42%	58%	73%	89%	105%	16%	-	-	-	-	12,740	-
NHS	World Lang 704	Konica	KM 654E	2014	7.00	116%	133%	17%	35%	52%	69%	-	11,000	-	-	-	-
NHS	Health Office 607	Konica	KM 227	2020	7.00	REPL	5%	3%	5%	8%	11%	4,249	-	-	-	-	-
NHS	Music	Konica	KM 654E	2016	9.00	26%	32%	38%	44%	50%	56%	-	-	-	-	-	13,380
NHS	Guidance	Konica	KM 364E	2014	8.00	67%	75%	83%	32%	40%	48%	-	-	5,160	-	-	-
NHS	Media Center	Konica	KM 454E	2014	8.00	75%	78%	81%	3%	6%	9%	-	-	7,070	-	-	-
NHS	Sped 801	Konica	KM 458E	2018	8.00	17%	25%	34%	42%	51%	59%	-	-	-	-	-	-
NHS	SS/English 703	Konica	KM 754E	2014	7.00	107%	118%	33%	44%	55%	66%	-	12,550	-	-	-	-
NHS	Eng/SS	Konica	KM 808	2020	5.00	REPL	26%	53%	79%	106%	132%	11,950	-	-	-	-	15,260
NHS	Grade Level	Konica	KM 368E	2020	7.00	REPL	13%	27%	40%	53%	67%	4,675	-	-	-	-	-
NHS	Math/Sci	Konica	KM 808	2020	5.00	REPL	31%	63%	94%	125%	157%	11,950	-	-	-	-	15,260
Williams	Main Office	Konica	KM 458E	2019	7.00	REPL	8%	15%	23%	31%	39%	-	-	-	-	-	-

Capital Improvement Plan
January 2020

School Department Capital Project Request

Project Title:												Fiscal Year:					
School Copiers												2022					
Williams	Downstairs	Konica	KM 458E	2019	7.00	REPL	10%	19%	29%	39%	48%	-	-	-	-	-	-
Williams	Main Office	Konica	KM 658E	2019	5.00	REPL	24%	48%	73%	97%	121%	-	-	-	-	13,380	-
Mitchell	Back Hallway	Konica	KM 654E	2017	7.00	36%	49%	63%	76%	90%	14%	-	-	-	-	12,740	-
Mitchell	Front Office	Konica	KM 654E	2014	7.00	128%	146%	18%	36%	54%	72%	-	11,000	-	-	-	-
Newman	Front Office	Konica	KM 458E	2020	6.00	REPL	15%	30%	46%	61%	76%	6,410	-	-	-	-	-
Newman	Hall Outside Office	Konica	KM 654E	2016	7.00	61%	75%	89%	104%	14%	29%	-	-	-	12,130	-	-
Newman	Hallway Near Café	Konica	KM 654E	2017	7.00	44%	61%	79%	96%	17%	35%	-	-	-	12,130	-	-
Newman	Down Stairs Hall	Konica	KM 558E	2018	7.00	30%	45%	59%	74%	89%	104%	-	-	-	-	-	13,380
Science Center	Science Center	Konica	KM 227	2020	7.00	REPL	5%	10%	14%	19%	24%	3,500	-	-	-	-	-
Pollard	8th Grade Hallway	Konica	KM 654E	2015	7.00	88%	108%	128%	20%	40%	60%	-	-	11,550	-	-	-
Pollard	Modulars	Konica	KM 754E	2014	8.00	46%	54%	62%	8%	16%	24%	-	-	13,180	-	-	-
Pollard	Main Office	Konica	KM 808	2020	7.00	REPL	17%	34%	51%	67%	84%	11,950	-	-	-	-	-
Pollard	7th Grade Work Area	Konica	KM 654E	2014	8.00	93%	103%	113%	10%	20%	30%	-	-	11,550	-	-	-
Pollard	Teachers Lounge	Konica	KM 454E	2017	5.00	75%	102%	26%	53%	79%	105%	-	6,730	-	-	-	-
High Rock	Room 207	Konica	KM 654E	2016	7.00	47%	58%	69%	80%	11%	22%	-	-	-	12,130	-	-
High Rock	Main Office	Konica	KM 754E	2014	7.00	104%	119%	16%	31%	47%	62%	-	12,550	-	-	-	-
Eliot	Main Office	Konica	KM 754E	2014	9.00	69%	77%	85%	93%	8%	16%	-	-	-	13,840	-	-
Eliot	Room 151	Konica	KM 658E	2018	8.00	17%	25%	34%	42%	50%	59%	-	-	-	-	-	-
Eliot	Room 210	Konica	KM 458E	2018	8.00	27%	40%	54%	67%	81%	94%	-	-	-	-	-	-
NCE Day Care	Main Office	XEROX	WC3550 X	2012	9.00	50%	58%	8%	16%	24%	32%	-	3,680	-	-	-	-
Administration	Production/Color	Konica	KM C3070L	2020	6.00	REPL	11%	21%	32%	42%	53%	36,772	-	-	-	-	-
Average Age Year of Replacement / Count of Machines						Average	6.88	11	7	7	5	4	6				
Totals												129,990	62,420	67,130	57,650	82,920	85,920

Capital Improvement Plan
January 2020

School Department Capital Project Request							
Project Title: School New and Replacement Furniture				Fiscal Year: 2022			
Request Type:	Acquisition	Classification:	Equipment	Primary Purpose:	Public Education	Status:	Existing Project
Department:	Needham Public Schools		Useful Life:	More than 20 Years	Project Cost:	\$25,000	
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		<u>Project Description and Considerations</u>					
Project Budget Elements		Project Budget		In FY05 Town Meeting approved funding of \$20,500 to begin the replacement of furniture in poor and fair condition throughout the School Department. By FY15, all furniture in 'poor' condition was replaced in the schools. The FY21-FY25 funding request will continue with the replacement of furniture in 'fair' condition at Pollard and provide funding for new classroom furniture as needed. A breakdown of the funding request is found below: FY21: \$35,000 * \$10,000 to conclude the replacement of furniture at Pollard Middle School in 'fair' condition * \$25,000 to purchase new classroom furniture as needed for new enrollment or replacement purposes. FY22 - FY25: \$25,000/year * \$25,000 to purchase new classroom furniture as needed for new enrollment or replacement purposes.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment		\$25,000					
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$25,000					

Capital Improvement Plan
January 2020

School Department Capital Project Request

Project Title: School New and Replacement Furniture

Fiscal Year: 2022

Supplemental Information

The anticipated furniture replacement schedule is depicted below:

Funding Plan	Request FY21	Request FY22	Request FY23	Request FY24	Request FY25	Total
Pollard	\$10,000					\$10,000
New Classrooms	<u>\$25,000</u>	<u>\$25,000</u>	<u>\$25,000</u>	<u>\$25,000</u>	<u>\$25,000</u>	<u>\$125,000</u>
Total	\$35,000	\$25,000	\$25,000	\$25,000	\$25,000	\$135,000

Capital Improvement Plan
January 2020

School Department Capital Project Request							
Project Title: School Department Technology Request						Fiscal Year: 2022	
Request Type:	Acquisition	Classification:	Technology	Primary Purpose:	Public Education	Status:	Existing-Revised Project
Department:	Needham Public Schools			Useful Life:	More than 5 Years	Project Cost:	\$490,150
How was the Project Cost Determined:		Industry References		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Not Applicable	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		<u>Project Description and Considerations</u>			
Project Budget Elements		Project Budget		The FY21-25 CIP request funds the purchase of School Department technology, including desktop computers, printers, classroom audio visual devices, specialized instructional labs, projectors, video displays, security cameras and electronic door access controllers. The request also incorporates funding for school technology infrastructure, which consists of servers, network hardware, wireless infrastructure, data cabling and access points. This request reflects the School Department's classroom technology standard and the decision in FY17 to move devices with a lifespan of less than five years (Digital Learning Devices, or DLDs, and staff laptops) to the operating budget. A chart summarizing the five-year (FY21-25) request is included below. See below for additional information.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology		\$490,150					
Other Expenses							
TOTAL		\$490,150					

Capital Improvement Plan
January 2020

School Department Capital Project Request			
Project Title:	School Department Technology Request	Fiscal Year:	2022

Supplemental Information

The FY21-25 Capital Improvement Plan (CIP) for school technology totals \$2,656,025 and includes \$2,091,025 for school hardware replacement and \$565,000 for school technology infrastructure. The request is similar to the prior submission, with the following exceptions:

- * \$651,550 in new, fifth-year (FY25) technology purchases, including \$538,550 for hardware replacement and \$113,000 for technology infrastructure.
- * The addition of \$120,000 to replace paging clocks/ aiphone technology in the first four years of the plan (FY21-24.) (The total request across all five years is \$150,000.)
- * A \$60,000 reduction to the cost of NHS TV studio equipment replacement in the first four years of the plan (FY21-24), reflecting cost savings realized from in-house versus outsourced construction and project coordination with Needham Channel.

The FY21 request is for \$586,575, an increase of \$30,000 from the FY21 projection included in the FY20-24 CIP. The \$586,575 total request includes \$473,575 for hardware and \$113,000 for infrastructure replacement. The FY21 request is unchanged from the prior year, with the exception of the following:

- * The addition of \$30,000 to replace paging clocks/ aiphone technology.

The FY22-25 CIP increases \$761,550 over the prior CIP, to add a new fifth year to the plan (@ \$651,550) and provide \$110,000 in net new funding during the first four years for the following items:

- * The addition of \$90,000 to replace paging clocks/ aiphone technology in FY22-24, which is offset by a \$60,000 reduction in the cost of NHS TV studio equipment replacement, for a net additional expense of \$30,000.
- * \$32,000 in additional funds to support replacement of the Pollard Lecture Hall projector in FY24.
- * \$48,000 in additional funds to support classroom AV/projector replacement in FY24 at the Mitchell (\$18,000) and NHS (\$30,000.)

Parameters Addressed:

Technology: The School Technology department supports this request.

A detailed breakout of changes from the prior year's FY21-24 request is highlighted below.

Summary	FY21	FY21	FY21	FY22	FY22	FY22	FY23	FY23	FY23	FY24	FY24	FY24	FY25	FY21-25
All Hardware (Including New Requests)	Prior	New	Change	Prior	New	Change	Prior	New	Change	Prior	New	Change	New	Total
Lab Computers	202,500	202,500	-	162,000	162,000	-	162,000	162,000	-	40,500	40,500	-	46,000	613,000
Science Lab Computers	-	-	-	-	-	-	-	-	-	-	-	-	54,000	54,000
TV Studio Computers	-	-	-	-	-	-	36,000	36,000	-	-	-	-	-	36,000
Graphics Lab Computers	-	-	-	-	-	-	-	-	-	44,000	44,000	-	-	44,000
Desktop Computers	106,500	106,500	-	21,000	21,000	-	21,000	21,000	-	21,000	21,000	-	116,000	285,500
Printers	20,075	20,075	-	37,650	37,650	-	-	-	-	-	-	-	22,550	80,275
Classroom AV/ Projection	80,000	80,000	-	110,000	110,000	-	90,000	90,000	-	80,000	128,000	48,000	240,000	648,000
Gym/ Performance Center Projection /Screen	-	-	-	-	-	-	-	-	-	18,000	50,000	32,000	-	50,000
NHS TV Studio	30,000	30,000	-	30,000	-	(30,000)	-	-	-	30,000	-	(30,000)	30,000	60,000
Paging Clocks Aiphone	-	30,000	30,000	-	30,000	30,000	-	30,000	30,000	-	30,000	30,000	30,000	150,000
Security Cameras	4,500	4,500	-	16,500	16,500	-	-	-	-	49,250	49,250	-	-	70,250
Subtotal	443,575	473,575	30,000	377,150	377,150	-	309,000	339,000	30,000	282,750	362,750	80,000	538,550	2,091,025

Capital Improvement Plan
January 2020

School Department Capital Project Request														
Project Title: School Department Technology Request			Fiscal Year: 2022											
Summary	FY21	FY21	FY21	FY22	FY22	FY22	FY23	FY23	FY23	FY24	FY24	FY24	FY25	FY21-25
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	<u>58,000</u>	<u>58,000</u>	-	<u>58,000</u>	<u>58,000</u>	-	<u>58,000</u>	<u>58,000</u>	-	<u>58,000</u>	<u>58,000</u>	-	<u>58,000</u>	<u>290,000</u>
Subtotal	113,000	113,000	-	113,000	113,000	-	113,000	113,000	-	113,000	113,000	-	113,000	565,000
Summary	FY21	FY21	FY21	FY22	FY22	FY22	FY23	FY23	FY23	FY24	FY24	FY24	FY25	FY21-25
Grand Total	Prior	New	Change	Prior	New	Change	Prior	New	Change	Prior	New	Change	New	Total
Hardware	443,575	473,575	30,000	377,150	377,150	-	309,000	339,000	30,000	282,750	362,750	80,000	538,550	2,091,025
Infrastructure	<u>113,000</u>	<u>113,000</u>	-	<u>113,000</u>	<u>113,000</u>	-	<u>113,000</u>	<u>113,000</u>	-	<u>113,000</u>	<u>113,000</u>	-	<u>113,000</u>	<u>565,000</u>
Grand Total	556,575	586,575	30,000	490,150	490,150	-	422,000	452,000	30,000	395,750	475,750	80,000	651,550	2,656,025

Capital Improvement Plan
January 2020

School Department Capital Project Request							
Project Title: Eliot Modular Classrooms					Fiscal Year: 2022		
Request Type:	Construction	Classification:	Building	Primary Purpose:	Public Education	Status:	Resubmitted Project
Department:	Needham Public Schools			Useful Life:	More than 20 Years	Project Cost:	\$601,300
How was the Project Cost Determined:		Hired Consultant		Budget Impact:	May increase annual operating expenses by more than \$100,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						Yes	
4. If 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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Not Applicable	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						Yes	
18. If funded, will this project increase the operating expense for any other department?						Yes	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		Potential new development in the Eliot district, if realized, could result in significant enrollment growth for the District's smallest (three-section) school. Based on a feasibility study conducted by Dore & Whittier Architects (February 2018), several modifications would be needed to accommodate the projected number of classrooms needed under this scenario. See below for additional information.			
Planning/Feasibility							
Design/Engineering		\$601,300					
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$601,300					

Capital Improvement Plan
January 2020

School Department Capital Project Request			
Project Title:	Eliot Modular Classrooms	Fiscal Year:	2022

Supplemental Information

This request would install six modular classrooms at the school. The modular classrooms (in combination with the separate Eliot lab conversion project) would allow the school to meet the following projected need for classrooms: one additional classroom by 2020/21; two classrooms by FY2024/25; four classrooms by 2025/26; five classrooms by 2026/27, and a total of seven classrooms by 2029/30.

Project costs are based on a preliminary project budget prepared February 2018 by Dore & Whittier, updated to reflect the following cost escalators: 10%/year (FY19-20), and 8%/year thereafter.

Preliminary Project Schedule:

Funding for Detailed Design: FY22 (May '21 ATM)

Detailed Design & Bidding: June '21 - Apr '22

Funding for Construction: FY23 (May '22 ATM)

Site Work/ Construction: June '22 - Aug '24 (24 Months, Due to Tight Site)

New Classrooms Open: (FY25) - Sept '24

Parameters Addressed:

Permitting: As required by Town Boards.

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

Building Improvements: This project is supported by the PPBC and Public Facilities departments.

Operating Budget Increase: Utilities. This placeholder estimate to be revised during design.

Other Departmental Assistance: PPBC Project Management

Operating Budget Increase: Utilities. This placeholder estimate to be revised during design process.

Project I

Eliot School Modular Classrooms (6 @ 1,200 sf/each) & Renovation of Existing Technology Lab

	10,000 sf	Construction (1)	A/E (2)	FF&E	Constr Mgmt (3)	Total	Cost/SF
	FY18 Project Cost (D&W) - Combined	2,515,500	437,250	180,000	15,500	3,148,250	314.83
	<u>Less Tech Room Conversion - Separate</u>	<u>91,000</u>	<u>24,000</u>	<u>30,000</u>	<u>6,000</u>	<u>151,000</u>	<u>167.78</u>
	TOTAL	2,424,500	413,250	150,000	9,500	2,997,250	147.05
10.00%	FY19 Cost Multiplier @ 5%	2,545,725	433,913	157,500	9,975	3,147,113	314.71
10.00%	FY20 Cost Multiplier @ 5%	2,800,298	477,304	173,250	10,973	3,461,824	346.18
8.00%	FY21 Cost Multiplier @ 5%	3,024,321	515,488	187,110	11,850	3,738,770	373.88
8.00%	FY22 Cost Multiplier @ 5%	3,266,267	556,727	202,079	12,798	4,037,871	403.79
8.00%	<u>FY23 Cost Multiplier @ 5%</u>	<u>3,527,568</u>	<u>601,265</u>	<u>218,245</u>	<u>13,822</u>	<u>4,360,901</u>	<u>436.09</u>
5 Years	TOTAL PROJECT COST	3,527,568	601,265	218,245	13,822	4,360,901	436.09
	TOTAL COST (ROUNDED)	3,527,600	601,300	218,200	13,800	4,360,900	436.09

Capital Improvement Plan
January 2020

School Department Capital Project Request

Project Title: Eliot Modular Classrooms

Fiscal Year: 2022

- (1) Construction includes site, modulars, renovation construction cost and contingencies
(2) A/E includes soft costs and 80% of owners' direct costs (less FF&E.)
(3) Construction management includes 20% of owners' direct costs (less FF&E.)

	FY22	FY23	Total
Fesibility			-
Arch/Engineering	601,300		601,300
Construction		3,527,600	3,527,600
Construction Management		13,800	13,800
<u>FF&E</u>	<u>=</u>	<u>218,200</u>	<u>218,200</u>
	601,300	3,759,600	4,360,900

	Modulars	Tech Room
D&W Estimated Cost (including escalati	3,728,750	164,500
Less Escalation	<u>(580,500)</u>	<u>(13,500)</u>
Subtotal	3,148,250	151,000

Capital Improvement Plan
January 2020

School Department Capital Project Request							
Project Title: Renovate/Reconstruct Emery Grover Building at Highland Avenue Location				Fiscal Year: 2022			
Request Type:	Construction	Classification:	Building	Primary Purpose:	Public Education	Status:	Existing-Revised Project
Department:	Needham Public Schools			Useful Life:	More than 30 Years	Project Cost:	\$2,282,800
How was the Project Cost Determined:		Hired Consultant		Budget Impact:	May increase annual operating expenses by more than \$100,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Not Applicable	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						Yes	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						Yes	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						Yes	
18. If funded, will this project increase the operating expense for any other department?						Yes	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		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. Emery Grover is on the National Register of Historic Buildings.			
Planning/Feasibility							
Design/Engineering		\$2,124,700					
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management		\$158,100					
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$2,282,800					

Capital Improvement Plan
January 2020

School Department Capital Project Request			
Project Title:	Renovate/Reconstruct Emery Grover Building at Highland Avenue Location	Fiscal Year:	2022

Supplemental Information

This request is for the renovation of the existing Emery Grover building at its present location. The October 2018 Special Town Meeting approved \$130,000 in funding for feasibility design. That study, which is expected to be completed by April - June 2020, will evaluate the various alternatives for completing this project, including: 1) full renovation and addition; 2) complete demolition and new construction; 3) preservation of one or more facades with new construction behind and 4) the sale and relocation of School District administration to leased/purchased space. The study also will determine the structure's suitability for school needs, will provide recommendations for programmatic or zoning changes, will address temporary relocation requirements and cost, and will identify how each alternative is categorized with regard to CPA funding and any required local, state and national approvals.

A preliminary budget and schedule for a renovation project are presented below, based on a pre-feasibility study performed in 2013 by DesignLAB Architects. The budget assumes that the building will be reconstructed at its current location and that Community Preservation Act funding will cover approximately 67% of construction and related soft costs. It also includes funds to temporarily re-locate staff to leased swing space during construction. The construction schedule, identified below, would be delayed by approximately one year if full demolition of the existing structure were required.

Preliminary Project Schedule:

Pre-Feasibility Study: FY14

Feasibility Study Funding: FY19 (Oct '18 STM)

Feasibility Study: FY20 (Jan '19 - April '20)

Design Funding: FY22 (May '21 ATM)

Detailed Design: FY22-FY23 (Jun '21 - Dec '22)

Construction Funding: FY23 (Oct '22 STM)

Bidding: Jan '23 - May '23

Emery Grover Occupies Swing Space: FY23-FY25 (June '23 - July '25)

New Building Opens: (FY26) July '25

Project Budget:

The above referenced project budget excludes \$30,000 approved at May 2013 Annual Town Meeting and \$130,000 provided by the October 2018 Special Town Meeting for feasibility design. The "Other Expenses" category includes \$1,669,200 to occupy leased swing space for one year, while the building is being renovated, plus \$70,100 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 escalation to the mid-point of construction, using 6%/year (FY14-FY16), 5.0%/year (FY17-18), 10.0%/year (FY19-20), and 8%/year thereafter.

This project is revised from the previous request to push the completion date back one year, to reflect the anticipated completion of the Emery Grover Feasibility study in Spring 2020 and the School Master Plan study in June 2020, the final recommendations from which will shape the final scope and budget for this project. According to the PPBC, it is possible that the final design budget may 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.

Capital Improvement Plan January 2020

School Department Capital Project Request

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

Fiscal Year: 2022

Parameters Addressed:

Project Costs Not Included: Prior year feasibility studies. (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 an FF&E budget for this new facility, including administrative 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.

CPC: Funding application to be submitted, if historic preservation is part of the final project scope.

Extend Useful Life: Yes, see above narrative.

Other Departmental Assistance: PPBC Project Management

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.

Project Budget Detail:

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 @ 67%	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
10.00% FY19 Cost Multiplier @ 10%	-	10,601,280	1,419,714	105,615	1,204,633	581,373	50,554	13,963,170	\$658	8,350,000	5,613,170
10.00% FY20 Cost Multiplier @ 10%	-	11,661,408	1,561,685	116,176	1,325,097	639,510	55,610	15,359,487	\$723	8,350,000	7,009,487
8.00% FY21 Cost Multiplier @ 8%	-	12,594,321	1,686,620	125,470	1,431,105	690,671	60,058	16,588,245	\$781	8,350,000	8,238,245
8.00% FY22 Cost Multiplier @ 8%	-	13,601,867	1,821,550	135,508	1,545,593	745,925	64,863	17,915,305	\$844	8,350,000	9,565,305
8.00% FY23 Cost Multiplier @ 8%	-	14,690,016	1,967,274	146,349	1,669,240	805,599	70,052	19,348,529	\$911	8,350,000	10,998,529
8.00% FY24 Cost Multiplier @ 8%	-	15,865,217	2,124,656	158,057	1,802,780	870,047	75,656	20,896,412	\$984	8,350,000	12,546,412
11 TOTAL PROJECT COST	-	15,865,217	2,124,656	158,057	1,802,780	870,047	75,656	20,896,412	984	8,350,000	12,546,412
TOTAL COST (ROUNDED)	-	15,865,200	2,124,700	158,100	1,802,800	870,000	75,700	20,896,500	\$984	8,350,000	12,546,500

Capital Improvement Plan January 2020

School Department Capital Project Request

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

Fiscal Year: 2022

Square Footage 21,235

Note - costs escalated at rates shown above, to midpoint of construction (FY23). FY14 & FY19 are feasibility funding years.

Project Funding Schedule	FY14	Oct '18 STM FY19	May '21 ATM FY22	Oct '22 STM FY23	FY14-22 Total
Pre-Design	30,000	130,000			-
Engineering & Design			2,124,700		2,124,700
Construction	0	-		15,865,200	15,865,200
Construction Management			158,100		158,100
FF&E				870,000	870,000
Other	0	-	-	<u>1,878,500</u>	<u>1,878,500</u>
Total	30,000	130,000	2,282,800	18,613,700	20,896,500
			Plus Feasibility Design:		<u>160,000</u>
					21,056,500

Capital Improvement Plan
January 2020

School Department Capital Project Request							
Project Title: Renovate Hillside Elementary School as Swing Space for School Construction Projects				Fiscal Year: 2022			
Request Type:	Construction	Classification:	Building	Primary Purpose:	Public Education	Status:	Existing-Revised Project
Department:	Needham Public Schools			Useful Life:	More than 30 Years	Project Cost:	\$4,236,600
How was the Project Cost Determined:		Hired Consultant		Budget Impact:		May increase annual operating expenses by more than \$100,000	
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Not Applicable	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						Yes	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						Yes	
18. If funded, will this project increase the operating expense for any other department?						Yes	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		This is a project to modernize the existing Hillside School for use as swing space for future school capital projects, after the new Sunita Williams Elementary School opens in September 2029 (FY20.) A potential schedule for the use of this facility as swing space is: Use A Emery Grover Renovation (June '23 - July '25), Use B Mitchell Renovation (Aug '25 - July '27), and Use C Pollard Renovation (Aug '29 - Aug '30.) This schedule assumes that modernization would occur in multiple phases, with minor interior modifications occurring for the Emery Grover occupation, and more substantial modifications occurring to accommodate the Mitchell and Pollard School populations. See below for additional information.			
Planning/Feasibility							
Design/Engineering		\$4,236,600					
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$4,236,600					

Capital Improvement Plan January 2020

School Department Capital Project Request

Project Title: Renovate Hillside Elementary School as Swing Space for School Construction Projects

Fiscal Year: 2022

Supplemental Information

Given the long time-line and design variables associated with this project, the potential project schedule below reflects interim uses A (Emery Grover) and B (Mitchell School) only. The overall project cost also is a placeholder, based on the "Option A" 'Base Repair' project estimate developed by Dore & Whittier Architects in 2014, which updates all major building systems to comply with current codes and regulations. The scope, timeline and budget of a final project would depend on the outcome of the feasibility studies below, as well as the ongoing School Master Plan, and could take various forms. (For example, an alternate project could tear down the facility and construct a modular classrooms campus.) The scope of the 'Option A' base repair budget does NOT include adding the modular classrooms that would be needed to accommodate the Mitchell School population or a full grade of Pollard students. The Feasibility Study scope should include a comparative analysis of the relative cost effectiveness of an alternate project to demolish the school and create modular swing space on this site, should reflect the smallest renovation scope possible, and should include the needed modular component. This project reflects the timeline below and the following cost escalators: 6%/year (FY14-FY16), 5.0%/year (FY17-18), 10.0%/year (FY19-20), and 8%/year thereafter.

This project is revised from the previous request to push the project time table back one year, to reflect the anticipated completion of the School Master Plan study in June 2020, the final recommendations from which will shape the final scope and budget for this project. According to the PPBC, it is possible that the final design budget may 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.

Potential Schedule

Feasibility Funding for Interim Uses A & B (FY21) - May '20 ATM
Funding for Detailed Design (FY22) - May '21 ATM
Design Bidding (FY21-22) - May '21 - Aug '21
Schematic Design for Interim Uses (Phases A, B, C) (FY22) - Sept '21 - Mar '22
Funding for Construction Interim Use A (FY23) - May '22 ATM
Detailed Design & Bidding Phase A (FY22-23) - May '22 - Oct '22
Interim Use - School Administration Construction/Repairs (FY23) - Nov '22 - May '23
Move School Administration to Hillside (FY23-24) - June '23 - July '23
School Administration Occupies Hillside (FY24-25) - Aug '23 - June '25

Funding for Construction Interim Use B Exterior Modulares (FY24) - Oct '23 STM
Design Development Exterior Modulares (FY24) - Jan '24 - June '24
Construction Documents Exterior Modulares (FY25) - July '24 - Oct '24
Bidding (FY25) - Nov '24 - Dec '24
Exterior Construction (FY25-26) - Jan '25 - Aug '25
Modular Reconstruction & Interior Renovation (FY25-26) - June '25 - Aug '25
Feasibility Funding for Interim Use C (FY27) - May '26 ATM
Mitchell School Occupies Hillside (FY26-27) - Aug '25 - July '27
Remaining Schedule & Budget to be Determined by Feasibility Study

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 an FF&E budget for this new facility, including technology.

Building Improvements: The PPBC supports this request.

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

Extend Useful Life: See above narrative.

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

Operating Budget Increase for Another Department: See above.

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

Capital Improvement Plan
January 2020

School Department Capital Project Request

Project Title: Renovate Hillside Elementary School as Swing Space for School Construction Projects

Fiscal Year: 2022

Project Budget:

**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 Mgmt	Total	Cost/SF
FY14 Project Cost (D&W)		225,000	8,835,814	1,649,200	1,032,000	412,300	12,154,314	\$270.07
TOTAL		225,000	8,835,814	1,649,200	1,032,000	412,300	12,154,314	\$270.07
		2%	73%	14%	8%	3%	100%	
6.00%	FY15 Cost Multiplier		9,365,963	1,748,152	1,093,920	437,038	12,645,073	\$280.97
6.00%	FY16 Cost Multiplier		9,927,921	1,853,041	1,159,555	463,260	13,403,777	\$297.83
5.00%	FY17 Cost Multiplier		10,424,317	1,945,693	1,217,533	486,423	14,073,966	\$312.72
5.00%	FY18 Cost Multiplier		10,945,532	2,042,978	1,278,410	510,744	14,777,664	\$328.36
10.00%	FY19 Cost Multiplier		12,040,086	2,247,276	1,406,251	561,819	16,255,431	\$361.19
10.00%	FY20 Cost Multiplier	100,000	13,244,094	2,472,003	1,546,876	618,001	17,980,974	\$399.53
8.00%	FY21 Cost Multiplier	100,000	14,303,622	2,669,763	1,670,626	667,441	19,411,452	\$431.32
8.00%	FY22 Cost Multiplier	100,000	15,447,912	2,883,345	1,804,276	720,836	20,956,368	\$465.65
8.00%	FY23 Cost Multiplier	100,000	16,683,745	3,114,012	1,948,618	778,503	22,624,877	\$502.72
8.00%	FY24 Cost Multiplier	100,000	18,018,444	3,363,133	2,104,507	840,783	24,426,868	\$542.76
8.00%	FY25 Cost Multiplier	100,000	19,459,920	3,632,184	2,272,868	908,046	26,373,017	\$586.00
8.00%	FY26 Cost Multiplier	225,000	21,016,713	3,922,758	2,454,697	980,690	28,599,858	\$635.48
8.00%	FY27 Cost Multiplier	225,000	22,698,050	4,236,579	2,651,073	1,059,145	30,869,847	\$685.92
9 Years	TOTAL PROJECT COST	225,000	22,698,050	4,236,579	2,651,073	1,059,145	30,869,847	\$685.92
	TOTAL COST (ROUNDED)	225,000	22,698,100	4,236,600	2,651,100	1,059,100	30,869,800	\$685.92

* Excludes modular temporary classrooms

Square Footage 45,005

	FY21	FY22	FY24	FY7	Total
Feasibility	100,000			125,000	225,000
Arch/Engineering		4,236,600			4,236,600
Construction			22,698,100		22,698,100
Construction Management			1,059,100		1,059,100
FF&E	0	-	2,651,100	0	2,651,100
Total	100,000	4,236,600	26,408,300	125,000	30,869,900

Capital Improvement Plan
January 2020

School Department Capital Project Request								
Project Title:		Renovate Mitchell Elementary School				Fiscal Year:		2022
Request Type:	Construction	Classification:	Building	Primary Purpose:	Public Education	Status:	Existing-Revised Project	
Department:	Needham Public Schools			Useful Life:	More than 30 Years	Project Cost:	\$650,000	
How was the Project Cost Determined:		Hired Consultant		Budget Impact:	May increase annual operating expenses by more than \$100,000			
Parameters						Response		
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?								
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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?								
Not Applicable								
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?								
No								
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?								
No								
12. Is this a request in response to a Court, Federal, or State order?								
No								
13. Is this a request in response to a documented public health or safety condition?								
No								
14. Is this a request to improve or make repairs to extend the useful life of a building?								
Yes								
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?								
No								
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?								
No								
17. Will any other department be required to provide assistance in order to complete the project?								
Yes								
18. If funded, will this project increase the operating expense for any other department?								
Yes								
19. If funded, will additional permanent staff be required?								
No								
Total New FTE's:		4		<u>Project Description and Considerations</u>				
Project Budget Elements		Project Budget		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 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. During construction, the school would occupy swing space at Hillside School.				
Planning/Feasibility		\$650,000						
Design/Engineering								
Land/ROW Acquisition								
Site Preparation								
Construction								
Construction Management								
Equipment								
Furniture, Fixtures, and Equipment								
Technology								
Other Expenses								
TOTAL		\$650,000						

Capital Improvement Plan January 2020

School Department Capital Project Request			
Project Title:	Renovate Mitchell Elementary School	Fiscal Year:	2022

Supplemental Information

A possible schedule for the Mitchell Elementary School Renovation project is shown below, based on Needham's experience with the Hillside Renovation Project with MSBA. A parallel project to update the Hillside Elementary School as swing space is presented separately. The total cost of the project may vary from the existing estimates, based on the combined scope and MSBA's participation in the Mitchell project development.

Potential Schedule

Submit SOI to MSBA (FY21) - Feb '21 - Apr '21

MSBA Board Meeting to Vote SOI (FY21-22) - April '21 - Aug '21

Feasibility (FY22-23)

Funding (FY22) - Oct '21 - STM

Designer Selection with MSBA (FY22) - Nov '22 - Mar '22

Feasibility Study (19 Months) (FY22-23) - Mar '22 - Jun '23

PDP (FY22-23) - Mar '22 - Aug '22

PSR (FY23) - Sept '22 - Jan '23

MSBA Board Meeting to Accept Feasibility (FY23) - Jan '23

Schematic Design Mitchell (FY23-24)

Schematic Design (FY23) - Jan '23 - June '23

DRT Review (FY23) - Feb '23

MSBA/DESE Review (FY23) - May '23 - June '23

Submit Schematic Design to MSBA (FY23) - June '23

Needham Boards Approve Schematic Design (FY23-24) - June '23 - Aug '23

MSBA Board Meeting to Approve Schematic Design (FY24) - July '23/Aug '23

Project Funding (FY24)

Submit Ballot Question to Secretary of State (FY24) - Aug '23

Special Town Meeting (FY24) - Oct '23

Override Ballot Question (FY24) - Nov '23

Project Funding Agreement (FY24) - Nov '23 - Dec '23

Design Development (FY24)

Design Development & Review (FY24) - Dec '23 - May '24

MSBA Review & Approval (FY24) - May '24 - June '24

Construction Documents

60% Submittal to MSBA (FY25) - July '24 - Oct '24

90% Submittal to MSBA (FY25) - Nov '24 - Jan '25

Completion of Construction Docs (FY25) - Jan '25 - Mar '25

Bidding Documents/ Procurement (FY25) - Apr '25 - July '25

Mitchell Occupies Hillside 9FY26-FY27) - Aug '25 - July '27

Construction (FY26-27) - Aug '25 - Aug '27

New Building Opens (FY28) - Sept '27

Project Budget:

All costs include escalation to the mid-point of construction, using 6%/year (FY14-FY16), 5.0%/year (FY17-18), 10.0%/year (FY19-20), and 8%/year thereafter.

This project is revised from the previous request to push the project time table back one year, to reflect the anticipated completion of the School Master Plan study in June 2020, the final recommendations from which will shape the final scope and budget for this project. According to the PPBC, it is possible that the final design budget may 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 an FF&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.

Capital Improvement Plan
January 2020

School Department Capital Project Request

Project Title: Renovate Mitchell Elementary School

Fiscal Year: 2022

Extend Useful Life: See above narrative.

Other Departmental Assistance: PPBC Project Management

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.

FTE: Estimate 2.0 Additional Custodians; 2.0 Additional Crossing Guards.

Pro

**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 2026 (FY27)**

82,227 SF Building		Feasibility	Construction*	A/E	FF&E	Constr Mgnt	Total	Cost/SF
FY14 Project Cost (D&W) - Mitchell		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	650,000	36,868,538	6,411,864	1,279,632	1,602,966	46,813,000	\$569
6.00%	FY16 Cost Multiplier	650,000	39,080,651	6,796,576	1,356,410	1,699,144	49,582,780	\$603
5.00%	FY17 Cost Multiplier	650,000	41,034,683	7,136,404	1,424,230	1,784,101	52,029,419	\$633
5.00%	FY18 Cost Multiplier	650,000	43,086,417	7,493,224	1,495,442	1,873,306	54,598,390	\$664
10.00%	FY19 Cost Multiplier	650,000	47,395,059	8,242,547	1,644,986	2,060,637	59,993,229	\$730
10.00%	FY20 Cost Multiplier	650,000	52,134,565	9,066,802	1,809,485	2,266,700	65,927,552	\$802
8.00%	FY21 Cost Multiplier	650,000	56,305,330	9,792,146	1,954,244	2,448,036	71,149,756	\$865
8.00%	FY22 Cost Multiplier	650,000	60,809,757	10,575,517	2,110,583	2,643,879	76,789,736	\$934
8.00%	FY23 Cost Multiplier	650,000	65,674,537	11,421,559	2,279,430	2,855,390	82,880,915	\$1,008
8.00%	FY24 Cost Multiplier	650,000	70,928,500	12,335,284	2,461,784	3,083,821	89,459,389	\$1,088
8.00%	FY25 Cost Multiplier	650,000	76,602,780	13,322,106	2,658,727	3,330,527	96,564,140	\$1,174
8.00%	FY26 Cost Multiplier	650,000	82,731,003	14,387,875	2,871,425	3,596,969	104,237,271	\$1,268
8.00%	FY27 Cost Multiplier	650,000	89,349,483	15,538,905	3,101,139	3,884,726	112,524,253	\$1,368
8.00%	FY28 Cost Multiplier	650,000	96,497,441	16,782,017	3,349,230	4,195,504	121,474,193	\$1,477
13 Years	TOTAL PROJECT COST	650,000	96,497,441	16,782,017	3,349,230	4,195,504	121,474,193	\$1,477
	TOTAL COST (ROUNDED)	650,000	96,497,400	16,782,000	3,349,200	4,195,500	121,474,200	\$1,477

* Excludes modular temporary classrooms

Square Footage 82,227

	Oct '21 STM FY22	Oct '23 STM FY24	FY25	Total
Feasibility	650,000			650,000
Arch/Engineering		16,782,000		16,782,000
Construction	0	96,497,400		96,497,400
Construction Management		4,195,500		4,195,500
FF&E		3,349,200	0	3,349,200
Total	650,000	120,824,100	-	121,474,100

Capital Improvement Plan
January 2020

School Department Capital Project Request							
Project Title: School Copiers						Fiscal Year: 2023	
Request Type:	Acquisition	Classification:	Equipment	Primary Purpose:	Public Education	Status:	Existing-Revised Project
Department:	Needham Public Schools	Useful Life:	More than 5 Years	Project Cost:	\$57,650		
How was the Project Cost Determined:		Industry References	Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000			
Parameters				Response			
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?				No			
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?				No			
3. Does this project require any permitting by any Town or State agency?				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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?				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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?				No			
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?				No			
12. Is this a request in response to a Court, Federal, or State order?				No			
13. Is this a request in response to a documented public health or safety condition?				No			
14. Is this a request to improve or make repairs to extend the useful life of a building?				No			
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?				No			
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?				No			
17. Will any other department be required to provide assistance in order to complete the project?				No			
18. If funded, will this project increase the operating expense for any other department?				No			
19. If funded, will additional permanent staff be required?				No			
Total New FTE's:		0	Project Description and Considerations				
Project Budget Elements		Project Budget		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. For more information, please see below.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment		\$57,650					
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$57,650					

Capital Improvement Plan
January 2020

School Department Capital Project Request

Project Title: School Copiers

Fiscal Year: 2023

Supplemental Information

Currently the School Department owns 42 copy machines. The FY21-FY25 request replaces the following numbers of copy machines:

Fiscal Year	#of Copy Machines Replaced		
FY21 (Requested)	7	FY24 (Requested)	4
FY22 (Requested)	7	FY25 (Requested)	6
FY23 (Requested)	5		

Copier replacement is planned on a life-cycle basis, which projects when a copier should be replaced based on actual usage and the manufacturer's total estimated capacity. As a result, copiers which are heavily used, are replaced more frequently than copiers that are lightly used. The average life cycle is calculated at 7 years, although planned replacement ages range from 5 - 9 years, depending on use. (The baseline industry assumed lifespan for copiers is five years for a typical floor-standing copiers. At maximum, high-end copiers and floor standing models that are not used often may last up to 7-10 years.) It is important to replace these machines regularly, even if they have not yet reached maximum copy allowances, given the additional operating expense associated with servicing and maintaining older equipment, as well as the difficulty in obtaining replacement parts. This analysis also assumes that copiers are re-deployed around the District as needed, to better match projected usage with equipment capacity.

The request is revised from the prior year submission to include:

* A new, fifth year replacement cycle (of \$85,920 for six copiers.)

* The addition of four copiers in FY21-24, based on the updated life cycle replacement cycle calculation, for a total of \$59,680.

Building	Location	Make	Model	Purchase Year	Age At Repl	FY20	FY21	FY22	FY23	FY24	FY25	FY20	FY21	FY22	FY23	FY24	FY25
Administration	2nd Floor	Konica	KM 658E	2018	6.00	21%	32%	43%	54%	64%	11%	-	-	-	-	12,740	-
Administration	Production Center	Konica	KM 1100	2020	6.00	REPL	10%	20%	29%	39%	49%	23,084	-	-	-	-	-
Administration	1st Floor	Konica	KM 454E	2017	6.00	49%	64%	79%	94%	15%	30%	-	-	-	7,420	-	-
Administration	Production Center	XEROX	D125	2012	6.00	36%	54%	71%	89%	107%	18%	-	-	-	-	44,700	-
Broadmeadow	Teachers' Room	Konica	KM 808	2020	5.00	REPL	20%	39%	59%	79%	98%	11,950	-	-	-	-	15,260
Broadmeadow	Main Office	Konica	KM 654E	2014	8.00	49%	58%	67%	9%	18%	27%	-	-	11,550	-	-	-
NHS	Main Office	Konica	KM 364E	2015	6.00	156%	167%	11%	22%	33%	44%	-	4,910	-	-	-	-
Broadmeadow	ETC	Konica	KM 227	2020	6.00	REPL	13%	26%	40%	53%	66%	3,500	-	-	-	-	-
NHS	Athletics	Konica	KM 454E	2016	6.00	67%	84%	100%	16%	33%	49%	-	-	7,070	-	-	-
NHS	Math/Sci Rm 205	Konica	KM 654E	2017	7.00	42%	58%	73%	89%	105%	16%	-	-	-	-	12,740	-
NHS	World Lang 704	Konica	KM 654E	2014	7.00	116%	133%	17%	35%	52%	69%	-	11,000	-	-	-	-
NHS	Health Office 607	Konica	KM 227	2020	7.00	REPL	5%	3%	5%	8%	11%	4,249	-	-	-	-	-
NHS	Music	Konica	KM 654E	2016	9.00	26%	32%	38%	44%	50%	56%	-	-	-	-	-	13,380
NHS	Guidance	Konica	KM 364E	2014	8.00	67%	75%	83%	32%	40%	48%	-	-	5,160	-	-	-
NHS	Media Center	Konica	KM 454E	2014	8.00	75%	78%	81%	3%	6%	9%	-	-	7,070	-	-	-
NHS	Sped 801	Konica	KM 458E	2018	8.00	17%	25%	34%	42%	51%	59%	-	-	-	-	-	-
NHS	SS/English 703	Konica	KM 754E	2014	7.00	107%	118%	33%	44%	55%	66%	-	12,550	-	-	-	-
NHS	Eng/SS	Konica	KM 808	2020	5.00	REPL	26%	53%	79%	106%	132%	11,950	-	-	-	-	15,260
NHS	Grade Level	Konica	KM 368E	2020	7.00	REPL	13%	27%	40%	53%	67%	4,675	-	-	-	-	-
NHS	Math/Sci	Konica	KM 808	2020	5.00	REPL	31%	63%	94%	125%	157%	11,950	-	-	-	-	15,260
Williams	Main Office	Konica	KM 458E	2019	7.00	REPL	8%	15%	23%	31%	39%	-	-	-	-	-	-

Capital Improvement Plan
January 2020

School Department Capital Project Request

Project Title:												Fiscal Year:					
School Copiers												2023					
Williams	Downstairs	Konica	KM 458E	2019	7.00	REPL	10%	19%	29%	39%	48%	-	-	-	-	-	-
Williams	Main Office	Konica	KM 658E	2019	5.00	REPL	24%	48%	73%	97%	121%	-	-	-	-	13,380	-
Mitchell	Back Hallway	Konica	KM 654E	2017	7.00	36%	49%	63%	76%	90%	14%	-	-	-	-	12,740	-
Mitchell	Front Office	Konica	KM 654E	2014	7.00	128%	146%	18%	36%	54%	72%	-	11,000	-	-	-	-
Newman	Front Office	Konica	KM 458E	2020	6.00	REPL	15%	30%	46%	61%	76%	6,410	-	-	-	-	-
Newman	Hall Outside Office	Konica	KM 654E	2016	7.00	61%	75%	89%	104%	14%	29%	-	-	-	12,130	-	-
Newman	Hallway Near Café	Konica	KM 654E	2017	7.00	44%	61%	79%	96%	17%	35%	-	-	-	12,130	-	-
Newman	Down Stairs Hall	Konica	KM 558E	2018	7.00	30%	45%	59%	74%	89%	104%	-	-	-	-	-	13,380
Science Center	Science Center	Konica	KM 227	2020	7.00	REPL	5%	10%	14%	19%	24%	3,500	-	-	-	-	-
Pollard	8th Grade Hallway	Konica	KM 654E	2015	7.00	88%	108%	128%	20%	40%	60%	-	-	11,550	-	-	-
Pollard	Modulars	Konica	KM 754E	2014	8.00	46%	54%	62%	8%	16%	24%	-	-	13,180	-	-	-
Pollard	Main Office	Konica	KM 808	2020	7.00	REPL	17%	34%	51%	67%	84%	11,950	-	-	-	-	-
Pollard	7th Grade Work Area	Konica	KM 654E	2014	8.00	93%	103%	113%	10%	20%	30%	-	-	11,550	-	-	-
Pollard	Teachers Lounge	Konica	KM 454E	2017	5.00	75%	102%	26%	53%	79%	105%	-	6,730	-	-	-	-
High Rock	Room 207	Konica	KM 654E	2016	7.00	47%	58%	69%	80%	11%	22%	-	-	-	12,130	-	-
High Rock	Main Office	Konica	KM 754E	2014	7.00	104%	119%	16%	31%	47%	62%	-	12,550	-	-	-	-
Eliot	Main Office	Konica	KM 754E	2014	9.00	69%	77%	85%	93%	8%	16%	-	-	-	13,840	-	-
Eliot	Room 151	Konica	KM 658E	2018	8.00	17%	25%	34%	42%	50%	59%	-	-	-	-	-	-
Eliot	Room 210	Konica	KM 458E	2018	8.00	27%	40%	54%	67%	81%	94%	-	-	-	-	-	-
NCE Day Care	Main Office	XEROX	WC3550 X	2012	9.00	50%	58%	8%	16%	24%	32%	-	3,680	-	-	-	-
Administration	Production/Color	Konica	KM C3070L	2020	6.00	REPL	11%	21%	32%	42%	53%	36,772	-	-	-	-	-
Average Age Year of Replacement / Count of Machines						Average	6.88	11	7	7	5	4	6				
Totals												129,990	62,420	67,130	57,650	82,920	85,920

Capital Improvement Plan
January 2020

School Department Capital Project Request							
Project Title: School New and Replacement Furniture				Fiscal Year: 2023			
Request Type:	Acquisition	Classification:	Equipment	Primary Purpose:	Public Education	Status:	Existing Project
Department:	Needham Public Schools		Useful Life:	More than 20 Years	Project Cost:	\$25,000	
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		<u>Project Description and Considerations</u>					
Project Budget Elements		Project Budget		In FY05 Town Meeting approved funding of \$20,500 to begin the replacement of furniture in poor and fair condition throughout the School Department. By FY15, all furniture in 'poor' condition was replaced in the schools. The FY21-FY25 funding request will continue with the replacement of furniture in 'fair' condition at Pollard and provide funding for new classroom furniture as needed. A breakdown of the funding request is found below: FY21: \$35,000 * \$10,000 to conclude the replacement of furniture at Pollard Middle School in 'fair' condition * \$25,000 to purchase new classroom furniture as needed for new enrollment or replacement purposes. FY22 - FY25: \$25,000/year * \$25,000 to purchase new classroom furniture as needed for new enrollment or replacement purposes.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment		\$25,000					
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$25,000					

Capital Improvement Plan
January 2020

School Department Capital Project Request

Project Title: School New and Replacement Furniture

Fiscal Year: 2023

Supplemental Information

The anticipated furniture replacement schedule is depicted below:

Funding Plan	Request FY21	Request FY22	Request FY23	Request FY24	Request FY25	Total
Pollard	\$10,000					\$10,000
New Classrooms	<u>\$25,000</u>	<u>\$25,000</u>	<u>\$25,000</u>	<u>\$25,000</u>	<u>\$25,000</u>	<u>\$125,000</u>
Total	\$35,000	\$25,000	\$25,000	\$25,000	\$25,000	\$135,000

Capital Improvement Plan
January 2020

School Department Capital Project Request							
Project Title: School Department Technology Request						Fiscal Year: 2023	
Request Type:	Acquisition	Classification:	Technology	Primary Purpose:	Public Education	Status:	Existing-Revised Project
Department:	Needham Public Schools			Useful Life:	More than 5 Years	Project Cost:	\$452,000
How was the Project Cost Determined:		Industry References		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Not Applicable	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		The FY21-25 CIP request funds the purchase of School Department technology, including desktop computers, printers, classroom audio visual devices, specialized instructional labs, projectors, video displays, security cameras and electronic door access controllers. The request also incorporates funding for school technology infrastructure, which consists of servers, network hardware, wireless infrastructure, data cabling and access points. This request reflects the School Department's classroom technology standard and the decision in FY17 to move devices with a lifespan of less than five years (Digital Learning Devices, or DLDs, and staff laptops) to the operating budget. A chart summarizing the five-year (FY21-25) request is included below. See below for additional information.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology		\$452,000					
Other Expenses							
TOTAL		\$452,000					

Capital Improvement Plan
January 2020

School Department Capital Project Request			
Project Title:	School Department Technology Request	Fiscal Year:	2023

Supplemental Information

The FY21-25 Capital Improvement Plan (CIP) for school technology totals \$2,656,025 and includes \$2,091,025 for school hardware replacement and \$565,000 for school technology infrastructure. The request is similar to the prior submission, with the following exceptions:

- * \$651,550 in new, fifth-year (FY25) technology purchases, including \$538,550 for hardware replacement and \$113,000 for technology infrastructure.
- * The addition of \$120,000 to replace paging clocks/ aiphone technology in the first four years of the plan (FY21-24.) (The total request across all five years is \$150,000.)
- * A \$60,000 reduction to the cost of NHS TV studio equipment replacement in the first four years of the plan (FY21-24), reflecting cost savings realized from in-house versus outsourced construction and project coordination with Needham Channel.

The FY21 request is for \$586,575, an increase of \$30,000 from the FY21 projection included in the FY20-24 CIP. The \$586,575 total request includes \$473,575 for hardware and \$113,000 for infrastructure replacement. The FY21 request is unchanged from the prior year, with the exception of the following:

- * The addition of \$30,000 to replace paging clocks/ aiphone technology.

The FY22-25 CIP increases \$761,550 over the prior CIP, to add a new fifth year to the plan (@ \$651,550) and provide \$110,000 in net new funding during the first four years for the following items:

- * The addition of \$90,000 to replace paging clocks/ aiphone technology in FY22-24, which is offset by a \$60,000 reduction in the cost of NHS TV studio equipment replacement, for a net additional expense of \$30,000.
- * \$32,000 in additional funds to support replacement of the Pollard Lecture Hall projector in FY24.
- * \$48,000 in additional funds to support classroom AV/projector replacement in FY24 at the Mitchell (\$18,000) and NHS (\$30,000.)

Parameters Addressed:

Technology: The School Technology department supports this request.

A detailed breakout of changes from the prior year's FY21-24 request is highlighted below.

Summary	FY21	FY21	FY21	FY22	FY22	FY22	FY23	FY23	FY23	FY24	FY24	FY24	FY25	FY21-25
All Hardware (Including New Requests)	Prior	New	Change	Prior	New	Change	Prior	New	Change	Prior	New	Change	New	Total
Lab Computers	202,500	202,500	-	162,000	162,000	-	162,000	162,000	-	40,500	40,500	-	46,000	613,000
Science Lab Computers	-	-	-	-	-	-	-	-	-	-	-	-	54,000	54,000
TV Studio Computers	-	-	-	-	-	-	36,000	36,000	-	-	-	-	-	36,000
Graphics Lab Computers	-	-	-	-	-	-	-	-	-	44,000	44,000	-	-	44,000
Desktop Computers	106,500	106,500	-	21,000	21,000	-	21,000	21,000	-	21,000	21,000	-	116,000	285,500
Printers	20,075	20,075	-	37,650	37,650	-	-	-	-	-	-	-	22,550	80,275
Classroom AV/ Projection	80,000	80,000	-	110,000	110,000	-	90,000	90,000	-	80,000	128,000	48,000	240,000	648,000
Gym/ Performance Center Projection /Screen	-	-	-	-	-	-	-	-	-	18,000	50,000	32,000	-	50,000
NHS TV Studio	30,000	30,000	-	30,000	-	(30,000)	-	-	-	30,000	-	(30,000)	30,000	60,000
Paging Clocks/Aiphone	-	30,000	30,000	-	30,000	30,000	-	30,000	30,000	-	30,000	30,000	30,000	150,000
Security Cameras	4,500	4,500	-	16,500	16,500	-	-	-	-	49,250	49,250	-	-	70,250
Subtotal	443,575	473,575	30,000	377,150	377,150	-	309,000	339,000	30,000	282,750	362,750	80,000	538,550	2,091,025

Capital Improvement Plan
January 2020

School Department Capital Project Request														
Project Title: School Department Technology Request										Fiscal Year: 2023				
Summary	FY21	FY21	FY21	FY22	FY22	FY22	FY23	FY23	FY23	FY24	FY24	FY24	FY25	FY21-25
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	FY21	FY21	FY21	FY22	FY22	FY22	FY23	FY23	FY23	FY24	FY24	FY24	FY25	FY21-25
Grand Total	Prior	New	Change	Prior	New	Change	Prior	New	Change	Prior	New	Change	New	Total
Hardware	443,575	473,575	30,000	377,150	377,150	-	309,000	339,000	30,000	282,750	362,750	80,000	538,550	2,091,025
Infrastructure	113,000	113,000	-	113,000	113,000	-	113,000	113,000	-	113,000	113,000	-	113,000	565,000
Grand Total	556,575	586,575	30,000	490,150	490,150	-	422,000	452,000	30,000	395,750	475,750	80,000	651,550	2,656,025

Capital Improvement Plan
January 2020

School Department Capital Project Request								
Project Title:		Eliot Modular Classrooms				Fiscal Year:		2023
Request Type:	Construction	Classification:	Building	Primary Purpose:	Public Education	Status:	Resubmitted Project	
Department:	Needham Public Schools			Useful Life:	More than 20 Years	Project Cost:	\$3,759,600	
How was the Project Cost Determined:		Hired Consultant		Budget Impact:	May increase annual operating expenses by more than \$100,000			
Parameters						Response		
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?							No	
3. Does this project require any permitting by any Town or State agency?							Yes	
4. If 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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							Not Applicable	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							No	
12. Is this a request in response to a Court, Federal, or State order?							No	
13. Is this a request in response to a documented public health or safety condition?							No	
14. Is this a request to improve or make repairs to extend the useful life of a building?							No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No	
17. Will any other department be required to provide assistance in order to complete the project?							Yes	
18. If funded, will this project increase the operating expense for any other department?							Yes	
19. If funded, will additional permanent staff be required?							No	
Total New FTE's:		0		Project Description and Considerations				
Project Budget Elements		Project Budget		Potential new development in the Eliot district, if realized, could result in significant enrollment growth for the District's smallest (three-section) school. Based on a feasibility study conducted by Dore & Whittier Architects (February 2018), several modifications would be needed to accommodate the projected number of classrooms needed under this scenario. See below for additional information.				
Planning/Feasibility								
Design/Engineering								
Land/ROW Acquisition								
Site Preparation								
Construction		\$3,527,600						
Construction Management		\$13,800						
Equipment								
Furniture, Fixtures, and Equipment		\$218,200						
Technology								
Other Expenses								
TOTAL		\$3,759,600						

Capital Improvement Plan
January 2020

School Department Capital Project Request

Project Title: Eliot Modular Classrooms

Fiscal Year: 2023

Supplemental Information

This request would install six modular classrooms at the school. The modular classrooms (in combination with the separate Eliot lab conversion project) would allow the school to meet the following projected need for classrooms: one additional classroom by 2020/21; two classrooms by FY2024/25; four classrooms by 2025/26; five classrooms by 2026/27, and a total of seven classrooms by 2029/30.

Project costs are based on a preliminary project budget prepared February 2018 by Dore & Whittier, updated to reflect the following cost escalators: 10%/year (FY19-20), and 8%/year thereafter.

Preliminary Project Schedule:

Funding for Detailed Design: FY22 (May '21 ATM)

Detailed Design & Bidding: June '21 - Apr '22

Funding for Construction: FY23 (May '22 ATM)

Site Work/ Construction: June '22 - Aug '24 (24 Months, Due to Tight Site)

New Classrooms Open: (FY25) - Sept '24

Parameters Addressed:

Permitting: As required by Town Boards.

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

Building Improvements: This project is supported by the PPBC and Public Facilities departments.

Operating Budget Increase: Utilities. This placeholder estimate to be revised during design.

Other Departmental Assistance: PPBC Project Management

Operating Budget Increase: Utilities. This placeholder estimate to be revised during design process.

Project B

Eliot School Modular Classrooms (6 @ 1,200 sf/each) & Renovation of Existing Technology Lab

	10,000 sf	Construction (1)	A/E (2)	FF&E	Constr Mgnt (3)	Total	Cost/SF
	FY18 Project Cost (D&W) - Combined	2,515,500	437,250	180,000	15,500	3,148,250	314.83
	<u>Less Tech Room Conversion - Separate</u>	<u>91,000</u>	<u>24,000</u>	<u>30,000</u>	<u>6,000</u>	<u>151,000</u>	<u>167.78</u>
	TOTAL	2,424,500	413,250	150,000	9,500	2,997,250	147.05
10.00%	FY19 Cost Multiplier @ 5%	2,545,725	433,913	157,500	9,975	3,147,113	314.71
10.00%	FY20 Cost Multiplier @ 5%	2,800,298	477,304	173,250	10,973	3,461,824	346.18
8.00%	FY21 Cost Multiplier @ 5%	3,024,321	515,488	187,110	11,850	3,738,770	373.88
8.00%	FY22 Cost Multiplier @ 5%	3,266,267	556,727	202,079	12,798	4,037,871	403.79
8.00%	<u>FY23 Cost Multiplier @ 5%</u>	<u>3,527,568</u>	<u>601,265</u>	<u>218,245</u>	<u>13,822</u>	<u>4,360,901</u>	<u>436.09</u>

Capital Improvement Plan
January 2020

School Department Capital Project Request

Project Title:	Eliot Modular Classrooms						Fiscal Year:	2023
5 Years	TOTAL PROJECT COST	3,527,568	601,265	218,245	13,822	4,360,901	436.09	
	TOTAL COST (ROUNDED)	3,527,600	601,300	218,200	13,800	4,360,900	436.09	

- (1) Construction includes site, modulares, renovation construction cost and contingencies
 (2) A/E includes soft costs and 80% of owners' direct costs (less FF&E.)
 (3) Construction management includes 20% of owners' direct costs (less FF&E.)

	FY22	FY23	Total
Fesibility			-
Arch/Engineering	601,300		601,300
Construction		3,527,600	3,527,600
Construction Management		13,800	13,800
FF&E	<u> </u> =	<u>218,200</u>	<u>218,200</u>
	601,300	3,759,600	4,360,900

	Modulars	Tech Room
D&W Estimated Cost (including escalati	3,728,750	164,500
Less Escalation	<u>(580,500)</u>	<u>(13,500)</u>
Subtotal	3,148,250	151,000

Capital Improvement Plan
January 2020

School Department Capital Project Request							
Project Title:		Renovate/Reconstruct Emery Grover Building at Highland Avenue Location				Fiscal Year: 2023	
Request Type:	Construction	Classification:	Building	Primary Purpose:	Public Education	Status:	Existing-Revised Project
Department:	Needham Public Schools		Useful Life:	More than 30 Years	Project Cost:	\$18,613,700	
How was the Project Cost Determined:		Hired Consultant		Budget Impact:	May increase annual operating expenses by more than \$100,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Not Applicable	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						Yes	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						Yes	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						Yes	
18. If funded, will this project increase the operating expense for any other department?						Yes	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		<u>Project Description and Considerations</u>			
Project Budget Elements		Project Budget		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. Emery Grover is on the National Register of Historic Buildings. See below for additional information.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction		\$15,865,200					
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment		\$870,000					
Technology							
Other Expenses		\$1,878,500					
TOTAL		\$18,613,700					

Capital Improvement Plan
January 2020

School Department Capital Project Request			
Project Title:	Renovate/Reconstruct Emery Grover Building at Highland Avenue Location	Fiscal Year:	2023

Supplemental Information

This request is for the renovation of the existing Emery Grover building at its present location. The October 2018 Special Town Meeting approved \$130,000 in funding for feasibility design. That study, which is expected to be completed by April - June 2020, will evaluate the various alternatives for completing this project, including: 1) full renovation and addition; 2) complete demolition and new construction; 3) preservation of one or more facades with new construction behind and 4) the sale and relocation of School District administration to leased/purchased space. The study also will determine the structure's suitability for school needs, will provide recommendations for programmatic or zoning changes, will address temporary relocation requirements and cost, and will identify how each alternative is categorized with regard to CPA funding and any required local, state and national approvals.

A preliminary budget and schedule for a renovation project are presented below, based on a pre-feasibility study performed in 2013 by DesignLAB Architects. The budget assumes that the building will be reconstructed at its current location and that Community Preservation Act funding will cover approximately 67% of construction and related soft costs. It also includes funds to temporarily re-locate staff to leased swing space during construction. The construction schedule, identified below, would be delayed by approximately one year if full demolition of the existing structure were required.

Preliminary Project Schedule:

Pre-Feasibility Study: FY14

Feasibility Study Funding: FY19 (Oct '18 STM)

Feasibility Study: FY20 (Jan '19 - April '20)

Design Funding: FY22 (May '21 ATM)

Detailed Design: FY22-FY23 (Jun '21 - Dec '22)

Construction Funding: FY23 (Oct '22 STM)

Bidding: Jan '23 - May '23

Emery Grover Occupies Swing Space: FY23-FY25 (June '23 - July '25)

New Building Opens: (FY26) July '25

Project Budget:

The above referenced project budget excludes \$30,000 approved at May 2013 Annual Town Meeting and \$130,000 provided by the October 2018 Special Town Meeting for feasibility design. The "Other Expenses" category includes \$1,669,200 to occupy leased swing space for one year, while the building is being renovated, plus \$70,100 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 escalation to the mid-point of construction, using 6%/year (FY14-FY16), 5.0%/year (FY17-18), 10.0%/year (FY19-20), and 8%/year thereafter.

This project is revised from the previous request to push the completion date back one year, to reflect the anticipated completion of the Emery Grover Feasibility study in Spring 2020 and the School Master Plan study in June 2020, the final recommendations from which will shape the final scope and budget for this project. According to the PPBC, it is possible that the final design budget may 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.

Capital Improvement Plan
January 2020

School Department Capital Project Request

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

Fiscal Year: 2023

Parameters Addressed:

Project Costs Not Included: Prior year feasibility studies. (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 an FF&E budget for this new facility, including administrative 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.

CPC: Funding application to be submitted, if historic preservation is part of the final project scope.

Extend Useful Life: Yes, see above narrative.

Other Departmental Assistance: PPBC Project Management

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.

Project Budget Detail:

Emery Grover Renovation Cost Estimated, Based on 2013 DesignLab Study

21,235 SF Building		Feasibility	Construction	A/E	Constr Mgnt	Temporary	FF&E	Other	Total	Cost/SF	Less CPA @ 67%	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
10.00%	FY19 Cost Multiplier @ 10%	-	10,601,280	1,419,714	105,615	1,204,633	581,373	50,554	13,963,170	\$658	8,350,000	5,613,170
10.00%	FY20 Cost Multiplier @ 10%	-	11,661,408	1,561,685	116,176	1,325,097	639,510	55,610	15,359,487	\$723	8,350,000	7,009,487
8.00%	FY21 Cost Multiplier @ 8%	-	12,594,321	1,686,620	125,470	1,431,105	690,671	60,058	16,588,245	\$781	8,350,000	8,238,245
8.00%	FY22 Cost Multiplier @ 8%	-	13,601,867	1,821,550	135,508	1,545,593	745,925	64,863	17,915,305	\$844	8,350,000	9,565,305
8.00%	FY23 Cost Multiplier @ 8%	-	14,690,016	1,967,274	146,349	1,669,240	805,599	70,052	19,348,529	\$911	8,350,000	10,998,529
8.00%	FY24 Cost Multiplier @ 8%	-	15,865,217	2,124,656	158,057	1,802,780	870,047	75,656	20,896,412	\$984	8,350,000	12,546,412
11	TOTAL PROJECT COST	-	15,865,217	2,124,656	158,057	1,802,780	870,047	75,656	20,896,412	984	8,350,000	12,546,412
	TOTAL COST (ROUNDED)	-	15,865,200	2,124,700	158,100	1,802,800	870,000	75,700	20,896,500	\$984	8,350,000	12,546,500

Capital Improvement Plan January 2020

School Department Capital Project Request

Project Title: Renovate/Reconstruct Emery Grover Building at Highland Avenue Location Fiscal Year: 2023

Square Footage 21,235

Note - costs escalated at rates shown above, to midpoint of construction (FY23). FY14 & FY19 are feasibility funding years.

Project Funding Schedule	FY14	Oct '18 STM FY19	May '21 ATM FY22	Oct '22 STM FY23	FY14-22 Total
Pre-Design	30,000	130,000			-
Engineering & Design			2,124,700		2,124,700
Construction	0	-		15,865,200	15,865,200
Construction Management			158,100		158,100
FF&E				870,000	870,000
Other	0	-	-	1,878,500	1,878,500
Total	30,000	130,000	2,282,800	18,613,700	20,896,500
			Plus Feasibility Design:		160,000
					21,056,500

Capital Improvement Plan
January 2020

School Department Capital Project Request							
Project Title: Renovate Hillside Elementary School as Swing Space for School Construction Projects				Fiscal Year: 2023			
Request Type:	Construction	Classification:	Building	Primary Purpose:	Public Education	Status:	Existing-Revised Project
Department:	Needham Public Schools			Useful Life:	More than 30 Years	Project Cost:	\$26,408,300
How was the Project Cost Determined:		Hired Consultant		Budget Impact:		May increase annual operating expenses by more than \$100,000	
Parameters							Response
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							Not Applicable
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							No
12. Is this a request in response to a Court, Federal, or State order?							No
13. Is this a request in response to a documented public health or safety condition?							No
14. Is this a request to improve or make repairs to extend the useful life of a building?							Yes
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							No
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No
17. Will any other department be required to provide assistance in order to complete the project?							Yes
18. If funded, will this project increase the operating expense for any other department?							Yes
19. If funded, will additional permanent staff be required?							No
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		This is a project to modernize the existing Hillside School for use as swing space for future school capital projects, after the new Sunita Williams Elementary School opens in September 2029 (FY20.) A potential schedule for the use of this facility as swing space is: Use A Emery Grover Renovation (June '23 - July '25), Use B Mitchell Renovation (Aug '25 - July '27), and Use C Pollard Renovation (Aug '29 - Aug '30.) This schedule assumes that modernization would occur in multiple phases, with minor interior modifications occurring for the Emery Grover occupation, and more substantial modifications occurring to accommodate the Mitchell and Pollard School populations. See below for additional information.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction		\$22,698,100					
Construction Management		\$1,059,100					
Equipment							
Furniture, Fixtures, and Equipment		\$2,651,100					
Technology							
Other Expenses							
TOTAL		\$26,408,300					

Capital Improvement Plan
January 2020

School Department Capital Project Request

Project Title: Renovate Hillside Elementary School as Swing Space for School Construction Projects

Fiscal Year: 2023

Supplemental Information

Given the long time-line and design variables associated with this project, the potential project schedule below reflects interim uses A (Emery Grover) and B (Mitchell School) only. The overall project cost also is a placeholder, based on the "Option A" 'Base Repair' project estimate developed by Dore & Whittier Architects in 2014, which updates all major building systems to comply with current codes and regulations. The scope, timeline and budget of a final project would depend on the outcome of the feasibility studies below, as well as the ongoing School Master Plan, and could take various forms. (For example, an alternate project could tear down the facility and construct a modular classrooms campus.) The scope of the 'Option A' base repair budget does NOT include adding the modular classrooms that would be needed to accommodate the Mitchell School population or a full grade of Pollard students. The Feasibility Study scope should include a comparative analysis of the relative cost effectiveness of an alternate project to demolish the school and create modular swing space on this site, should reflect the smallest renovation scope possible, and should include the needed modular component. This project reflects the timeline below and the following cost escalators: 6%/year (FY14-FY16), 5.0%/year (FY17-18), 10.0%/year (FY19-20), and 8%/year thereafter.

This project is revised from the previous request to push the project time table back one year, to reflect the anticipated completion of the School Master Plan study in June 2020, the final recommendations from which will shape the final scope and budget for this project. According to the PPBC, it is possible that the final design budget may 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.

Potential Schedule

Feasibility Funding for Interim Uses A & B (FY21) - May '20 ATM
Funding for Detailed Design (FY22) - May '21 ATM
Design Bidding (FY21-22) - May '21 - Aug '21
Schematic Design for Interim Uses (Phases A, B, C) (FY22) - Sept '21 - Mar '22
Funding for Construction Interim Use A (FY23) - May '22 ATM
Detailed Design & Bidding Phase A (FY22-23) - May '22 - Oct '22
Interim Use - School Administration Construction/Repairs (FY23) - Nov '22 - May '23
Move School Administration to Hillside (FY23-24) - June '23 - July '23
School Administration Occupies Hillside (FY24-25) - Aug '23 - June '25

Funding for Construction Interim Use B Exterior Modulares (FY24) - Oct '23 STM
Design Development Exterior Modulares (FY24) - Jan '24 - June '24
Construction Documents Exterior Modulares (FY25) - July '24 - Oct '24
Bidding (FY25) - Nov '24 - Dec '24
Exterior Construction (FY25-26) - Jan '25 - Aug '25
Modular Reconstruction & Interior Renovation (FY25-26) - June '25 - Aug '25
Feasibility Funding for Interim Use C (FY27) - May '26 ATM
Mitchell School Occupies Hillside (FY26-27) - Aug '25 - July '27
Remaining Schedule & Budget to be Determined by Feasibility Study

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 an FF&E budget for this new facility, including technology.

Building Improvements: The PPBC supports this request.

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

Extend Useful Life: See above narrative.

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

Operating Budget Increase for Another Department: See above.

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

Capital Improvement Plan
January 2020

School Department Capital Project Request								
Project Title: Renovate Hillside Elementary School as Swing Space for School Construction Projects						Fiscal Year: 2023		
<u>Project Budget:</u> 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 Mgmt	Total	Cost/SF
FY14 Project Cost (D&W)		<u>225,000</u>	<u>8,835,814</u>	<u>1,649,200</u>	<u>1,032,000</u>	<u>412,300</u>	<u>12,154,314</u>	<u>\$270.07</u>
TOTAL		225,000	8,835,814	1,649,200	1,032,000	412,300	12,154,314	\$270.07
		2%	73%	14%	8%	3%	100%	
6.00%	FY15 Cost Multiplier		9,365,963	1,748,152	1,093,920	437,038	12,645,073	\$280.97
6.00%	FY16 Cost Multiplier		9,927,921	1,853,041	1,159,555	463,260	13,403,777	\$297.83
5.00%	FY17 Cost Multiplier		10,424,317	1,945,693	1,217,533	486,423	14,073,966	\$312.72
5.00%	FY18 Cost Multiplier		10,945,532	2,042,978	1,278,410	510,744	14,777,664	\$328.36
10.00%	FY19 Cost Multiplier		12,040,086	2,247,276	1,406,251	561,819	16,255,431	\$361.19
10.00%	FY20 Cost Multiplier	100,000	13,244,094	2,472,003	1,546,876	618,001	17,980,974	\$399.53
8.00%	FY21 Cost Multiplier	100,000	14,303,622	2,669,763	1,670,626	667,441	19,411,452	\$431.32
8.00%	FY22 Cost Multiplier	100,000	15,447,912	2,883,345	1,804,276	720,836	20,956,368	\$465.65
8.00%	FY23 Cost Multiplier	100,000	16,683,745	3,114,012	1,948,618	778,503	22,624,877	\$502.72
8.00%	FY24 Cost Multiplier	100,000	18,018,444	3,363,133	2,104,507	840,783	24,426,868	\$542.76
8.00%	FY25 Cost Multiplier	100,000	19,459,920	3,632,184	2,272,868	908,046	26,373,017	\$586.00
8.00%	FY26 Cost Multiplier	225,000	21,016,713	3,922,758	2,454,697	980,690	28,599,858	\$635.48
8.00%	FY27 Cost Multiplier	225,000	22,698,050	4,236,579	2,651,073	1,059,145	30,869,847	\$685.92
9 Years	TOTAL PROJECT COST	225,000	22,698,050	4,236,579	2,651,073	1,059,145	30,869,847	\$685.92
	TOTAL COST (ROUNDED)	225,000	22,698,100	4,236,600	2,651,100	1,059,100	30,869,800	\$685.92
* Excludes modular temporary classrooms								
Square Footage			45,005					
		FY21	FY22	FY24	FY7	Total		
	Feasibility	100,000			125,000	225,000		
	Arch/Engineering		4,236,600			4,236,600		
	Construction			22,698,100		22,698,100		
	Construction Management			1,059,100		1,059,100		
	FF&E	0		2,651,100	0	2,651,100		
	Total	100,000	4,236,600	26,408,300	125,000	30,869,900		

Capital Improvement Plan
January 2020

School Department Capital Project Request

Project Title: School Copiers								Fiscal Year: 2024	
Request Type:	Acquisition	Classification:	Equipment	Primary Purpose:	Public Education	Status:	Existing-Revised Project		
Department:	Needham Public Schools			Useful Life:	More than 5 Years	Project Cost:	\$82,920		
How was the Project Cost Determined:		Industry References		Budget Impact:		Negligible impact on the annual operating expenses less than \$5,000			
<u>Parameters</u>								<u>Response</u>	
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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?								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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?								No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?								No	
12. Is this a request in response to a Court, Federal, or State order?								No	
13. Is this a request in response to a documented public health or safety condition?								No	
14. Is this a request to improve or make repairs to extend the useful life of a building?								No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?								No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?								No	
17. Will any other department be required to provide assistance in order to complete the project?								No	
18. If funded, will this project increase the operating expense for any other department?								No	
19. If funded, will additional permanent staff be required?								No	
Total New FTE's:		0		<u>Project Description and Considerations</u>					
Project Budget Elements				Project Budget					
Planning/Feasibility				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. For more information, please see below.					
Design/Engineering									
Land/ROW Acquisition									
Site Preparation									
Construction									
Construction Management									
Equipment									
Furniture, Fixtures, and Equipment									
Technology									
Other Expenses									
TOTAL				\$82,920					

Capital Improvement Plan
January 2020

School Department Capital Project Request

Project Title: School Copiers

Fiscal Year:

2024

Supplemental Information

Currently the School Department owns 42 copy machines. The FY21-FY25 request replaces the following numbers of copy machines:

Fiscal Year	#of Copy Machines Replaced		
FY21 (Requested)	7	FY24 (Requested)	4
FY22 (Requested)	7	FY25 (Requested)	6
FY23 (Requested)	5		

Copier replacement is planned on a life-cycle basis, which projects when a copier should be replaced based on actual usage and the manufacturer's total estimated capacity. As a result, copiers which are heavily used, are replaced more frequently than copiers that are lightly used. The average life cycle is calculated at 7 years, although planned replacement ages range from 5 - 9 years, depending on use. (The baseline industry assumed lifespan for copiers is five years for a typical floor-standing copiers. At maximum, high-end copiers and floor standing models that are not used often may last up to 7-10 years.) It is important to replace these machines regularly, even if they have not yet reached maximum copy allowances, given the additional operating expense associated with servicing and maintaining older equipment, as well as the difficulty in obtaining replacement parts. This analysis also assumes that copiers are re-deployed around the District as needed, to better match projected usage with equipment capacity.

The request is revised from the prior year submission to include:

* A new, fifth year replacement cycle (of \$85,920 for six copiers.)

* The addition of four copiers in FY21-24, based on the updated life cycle replacement cycle calculation, for a total of \$59,680.

Building	Location	Make	Model	Purchase Year	Age At Repl	FY20	FY21	FY22	FY23	FY24	FY25	FY20	FY21	FY22	FY23	FY24	FY25
Administration	2nd Floor	Konica	KM 658E	2018	6.00	21%	32%	43%	54%	64%	11%	-	-	-	-	12,740	-
Administration	Production Center	Konica	KM 1100	2020	6.00	REPL	10%	20%	29%	39%	49%	23,084	-	-	-	-	-
Administration	1st Floor	Konica	KM 454E	2017	6.00	49%	64%	79%	94%	15%	30%	-	-	-	7,420	-	-
Administration	Production Center	XEROX	D125	2012	6.00	36%	54%	71%	89%	107%	18%	-	-	-	-	44,700	-
Broadmeadow	Teachers' Room	Konica	KM 808	2020	5.00	REPL	20%	39%	59%	79%	98%	11,950	-	-	-	-	15,260
Broadmeadow	Main Office	Konica	KM 654E	2014	8.00	49%	58%	67%	9%	18%	27%	-	-	11,550	-	-	-
NHS	Main Office	Konica	KM 364E	2015	6.00	156%	167%	11%	22%	33%	44%	-	4,910	-	-	-	-
Broadmeadow	ETC	Konica	KM 227	2020	6.00	REPL	13%	26%	40%	53%	66%	3,500	-	-	-	-	-
NHS	Athletics	Konica	KM 454E	2016	6.00	67%	84%	100%	16%	33%	49%	-	-	7,070	-	-	-
NHS	Math/Sci Rm 205	Konica	KM 654E	2017	7.00	42%	58%	73%	89%	105%	16%	-	-	-	-	12,740	-
NHS	World Lang 704	Konica	KM 654E	2014	7.00	116%	133%	17%	35%	52%	69%	-	11,000	-	-	-	-
NHS	Health Office 607	Konica	KM 227	2020	7.00	REPL	5%	3%	5%	8%	11%	4,249	-	-	-	-	-
NHS	Music	Konica	KM 654E	2016	9.00	26%	32%	38%	44%	50%	56%	-	-	-	-	-	13,380
NHS	Guidance	Konica	KM 364E	2014	8.00	67%	75%	83%	32%	40%	48%	-	-	5,160	-	-	-
NHS	Media Center	Konica	KM 454E	2014	8.00	75%	78%	81%	3%	6%	9%	-	-	7,070	-	-	-
NHS	Sped 801	Konica	KM 458E	2018	8.00	17%	25%	34%	42%	51%	59%	-	-	-	-	-	-
NHS	SS/English 703	Konica	KM 754E	2014	7.00	107%	118%	33%	44%	55%	66%	-	12,550	-	-	-	-
NHS	Eng/SS	Konica	KM 808	2020	5.00	REPL	26%	53%	79%	106%	132%	11,950	-	-	-	-	15,260
NHS	Grade Level	Konica	KM 368E	2020	7.00	REPL	13%	27%	40%	53%	67%	4,675	-	-	-	-	-
NHS	Math/Sci	Konica	KM 808	2020	5.00	REPL	31%	63%	94%	125%	157%	11,950	-	-	-	-	15,260
Williams	Main Office	Konica	KM 458E	2019	7.00	REPL	8%	15%	23%	31%	39%	-	-	-	-	-	-

Capital Improvement Plan
January 2020

School Department Capital Project Request

												Fiscal Year:						2024
Project Title: School Copiers																		
Williams	Downstairs	Konica	KM 458E	2019	7.00	REPL	10%	19%	29%	39%	48%	-	-	-	-	-	-	-
Williams	Main Office	Konica	KM 658E	2019	5.00	REPL	24%	48%	73%	97%	121%	-	-	-	-	-	-	13,380
Mitchell	Back Hallway	Konica	KM 654E	2017	7.00	36%	49%	63%	76%	90%	14%	-	-	-	-	12,740	-	-
Mitchell	Front Office	Konica	KM 654E	2014	7.00	128%	146%	18%	36%	54%	72%	-	11,000	-	-	-	-	-
Newman	Front Office	Konica	KM 458E	2020	6.00	REPL	15%	30%	46%	61%	76%	6,410	-	-	-	-	-	-
Newman	Hall Outside Office	Konica	KM 654E	2016	7.00	61%	75%	89%	104%	14%	29%	-	-	-	12,130	-	-	-
Newman	Hallway Near Café	Konica	KM 654E	2017	7.00	44%	61%	79%	96%	17%	35%	-	-	-	12,130	-	-	-
Newman	Down Stairs Hall	Konica	KM 558E	2018	7.00	30%	45%	59%	74%	89%	104%	-	-	-	-	-	-	13,380
Science Center	Science Center	Konica	KM 227	2020	7.00	REPL	5%	10%	14%	19%	24%	3,500	-	-	-	-	-	-
Pollard	8th Grade Hallway	Konica	KM 654E	2015	7.00	88%	108%	128%	20%	40%	60%	-	-	11,550	-	-	-	-
Pollard	Modulars	Konica	KM 754E	2014	8.00	46%	54%	62%	8%	16%	24%	-	-	13,180	-	-	-	-
Pollard	Main Office	Konica	KM 808	2020	7.00	REPL	17%	34%	51%	67%	84%	11,950	-	-	-	-	-	-
Pollard	7th Grade Work Area	Konica	KM 654E	2014	8.00	93%	103%	113%	10%	20%	30%	-	-	11,550	-	-	-	-
Pollard	Teachers Lounge	Konica	KM 454E	2017	5.00	75%	102%	26%	53%	79%	105%	-	6,730	-	-	-	-	-
High Rock	Room 207	Konica	KM 654E	2016	7.00	47%	58%	69%	80%	11%	22%	-	-	-	12,130	-	-	-
High Rock	Main Office	Konica	KM 754E	2014	7.00	104%	119%	16%	31%	47%	62%	-	12,550	-	-	-	-	-
Eliot	Main Office	Konica	KM 754E	2014	9.00	69%	77%	85%	93%	8%	16%	-	-	-	13,840	-	-	-
Eliot	Room 151	Konica	KM 658E	2018	8.00	17%	25%	34%	42%	50%	59%	-	-	-	-	-	-	-
Eliot	Room 210	Konica	KM 458E	2018	8.00	27%	40%	54%	67%	81%	94%	-	-	-	-	-	-	-
NCE Day Care	Main Office	XEROX	WC3550 X	2012	9.00	50%	58%	8%	16%	24%	32%	-	3,680	-	-	-	-	-
Administration	Production/Color	Konica	KM C3070L	2020	6.00	REPL	11%	21%	32%	42%	53%	36,772	-	-	-	-	-	-
Average Age Year of Replacement / Count of Machines						Average	6.88	11	7	7	5	4	6					
Totals												129,990	62,420	67,130	57,650	82,920	85,920	

Capital Improvement Plan
January 2020

School Department Capital Project Request							
Project Title: School New and Replacement Furniture				Fiscal Year: 2024			
Request Type: Acquisition	Classification: Equipment	Primary Purpose: Public Education	Status: Existing Project				
Department: Needham Public Schools	Useful Life: More than 20 Years	Project Cost: \$25,000					
How was the Project Cost Determined: In-House Estimate		Budget Impact: Negligible impact on the annual operating expenses less than \$5,000					
Parameters			Response				
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?			No				
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?			No				
3. Does this project require any permitting by any Town or State agency?			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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?			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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?			No				
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?			No				
12. Is this a request in response to a Court, Federal, or State order?			No				
13. Is this a request in response to a documented public health or safety condition?			No				
14. Is this a request to improve or make repairs to extend the useful life of a building?			No				
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			No				
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?			No				
17. Will any other department be required to provide assistance in order to complete the project?			No				
18. If funded, will this project increase the operating expense for any other department?			No				
19. If funded, will additional permanent staff be required?			No				
Total New FTE's:		<u>Project Description and Considerations</u>					
Project Budget Elements		Project Budget					
Planning/Feasibility		In FY05 Town Meeting approved funding of \$20,500 to begin the replacement of furniture in poor and fair condition throughout the School Department. By FY15, all furniture in 'poor' condition was replaced in the schools. The FY21-FY25 funding request will continue with the replacement of furniture in 'fair' condition at Pollard and provide funding for new classroom furniture as needed. A breakdown of the funding request is found below: FY21: \$35,000 * \$10,000 to conclude the replacement of furniture at Pollard Middle School in 'fair' condition * \$25,000 to purchase new classroom furniture as needed for new enrollment or replacement purposes. FY22 - FY25: \$25,000/year * \$25,000 to purchase new classroom furniture as needed for new enrollment or replacement purposes.					
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$25,000					

Capital Improvement Plan
January 2020

School Department Capital Project Request

Project Title: School New and Replacement Furniture

Fiscal Year: 2024

Supplemental Information

The anticipated furniture replacement schedule is depicted below:

Funding Plan	Request FY21	Request FY22	Request FY23	Request FY24	Request FY25	Total
Pollard	\$10,000					\$10,000
New Classrooms	<u>\$25,000</u>	<u>\$25,000</u>	<u>\$25,000</u>	<u>\$25,000</u>	<u>\$25,000</u>	<u>\$125,000</u>
Total	\$35,000	\$25,000	\$25,000	\$25,000	\$25,000	\$135,000

Capital Improvement Plan
January 2020

School Department Capital Project Request							
Project Title: School Department Technology Request						Fiscal Year: 2024	
Request Type:	Acquisition	Classification:	Technology	Primary Purpose:	Public Education	Status:	Existing-Revised Project
Department:	Needham Public Schools			Useful Life:	More than 5 Years	Project Cost:	\$475,750
How was the Project Cost Determined:		Industry References		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Not Applicable	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		The FY21-25 CIP request funds the purchase of School Department technology, including desktop computers, printers, classroom audio visual devices, specialized instructional labs, projectors, video displays, security cameras and electronic door access controllers. The request also incorporates funding for school technology infrastructure, which consists of servers, network hardware, wireless infrastructure, data cabling and access points. This request reflects the School Department's classroom technology standard and the decision in FY17 to move devices with a lifespan of less than five years (Digital Learning Devices, or DLDs, and staff laptops) to the operating budget. A chart summarizing the five-year (FY21-25) request is included below. See below for additional information.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology		\$475,750					
Other Expenses							
TOTAL		\$475,750					

Capital Improvement Plan
January 2020

School Department Capital Project Request			
Project Title:	School Department Technology Request	Fiscal Year:	2024

Supplemental Information

The FY21-25 Capital Improvement Plan (CIP) for school technology totals \$2,656,025 and includes \$2,091,025 for school hardware replacement and \$565,000 for school technology infrastructure. The request is similar to the prior submission, with the following exceptions:

- * \$651,550 in new, fifth-year (FY25) technology purchases, including \$538,550 for hardware replacement and \$113,000 for technology infrastructure.
- * The addition of \$120,000 to replace paging clocks/ aiphone technology in the first four years of the plan (FY21-24.) (The total request across all five years is \$150,000.)
- * A \$60,000 reduction to the cost of NHS TV studio equipment replacement in the first four years of the plan (FY21-24), reflecting cost savings realized from in-house versus outsourced construction and project coordination with Needham Channel.

The FY21 request is for \$586,575, an increase of \$30,000 from the FY21 projection included in the FY20-24 CIP. The \$586,575 total request includes \$473,575 for hardware and \$113,000 for infrastructure replacement. The FY21 request is unchanged from the prior year, with the exception of the following:

- * The addition of \$30,000 to replace paging clocks/ aiphone technology.

The FY22-25 CIP increases \$761,550 over the prior CIP, to add a new fifth year to the plan (@ \$651,550) and provide \$110,000 in net new funding during the first four years for the following items:

- * The addition of \$90,000 to replace paging clocks/ aiphone technology in FY22-24, which is offset by a \$60,000 reduction in the cost of NHS TV studio equipment replacement, for a net additional expense of \$30,000.
- * \$32,000 in additional funds to support replacement of the Pollard Lecture Hall projector in FY24.
- * \$48,000 in additional funds to support classroom AV/projector replacement in FY24 at the Mitchell (\$18,000) and NHS (\$30,000.)

Parameters Addressed:

Technology: The School Technology department supports this request.

A detailed breakout of changes from the prior year's FY21-24 request is highlighted below.

Summary	FY21	FY21	FY21	FY22	FY22	FY22	FY23	FY23	FY23	FY24	FY24	FY24	FY25	FY21-25
All Hardware (Including New Requests)	Prior	New	Change	Prior	New	Change	Prior	New	Change	Prior	New	Change	New	Total
Lab Computers	202,500	202,500	-	162,000	162,000	-	162,000	162,000	-	40,500	40,500	-	46,000	613,000
Science Lab Computers	-	-	-	-	-	-	-	-	-	-	-	-	54,000	54,000
TV Studio Computers	-	-	-	-	-	-	36,000	36,000	-	-	-	-	-	36,000
Graphics Lab Computers	-	-	-	-	-	-	-	-	-	44,000	44,000	-	-	44,000
Desktop Computers	106,500	106,500	-	21,000	21,000	-	21,000	21,000	-	21,000	21,000	-	116,000	285,500
Printers	20,075	20,075	-	37,650	37,650	-	-	-	-	-	-	-	22,550	80,275
Classroom AV/ Projection	80,000	80,000	-	110,000	110,000	-	90,000	90,000	-	80,000	128,000	48,000	240,000	648,000
Gym/ Performance Center Projection /Screen	-	-	-	-	-	-	-	-	-	18,000	50,000	32,000	-	50,000
NHS TV Studio	30,000	30,000	-	30,000	-	(30,000)	-	-	-	30,000	-	(30,000)	30,000	60,000
Paging Clocks/Aiphone	-	30,000	30,000	-	30,000	30,000	-	30,000	30,000	-	30,000	30,000	30,000	150,000
Security Cameras	4,500	4,500	-	16,500	16,500	-	-	-	-	49,250	49,250	-	-	70,250
Subtotal	443,575	473,575	30,000	377,150	377,150	-	309,000	339,000	30,000	282,750	362,750	80,000	538,550	2,091,025

Capital Improvement Plan
January 2020

School Department Capital Project Request														
Project Title: School Department Technology Request										Fiscal Year: 2024				
Summary	FY21	FY21	FY21	FY22	FY22	FY22	FY23	FY23	FY23	FY24	FY24	FY24	FY25	FY21-25
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	FY21	FY21	FY21	FY22	FY22	FY22	FY23	FY23	FY23	FY24	FY24	FY24	FY25	FY21-25
Grand Total	Prior	New	Change	Prior	New	Change	Prior	New	Change	Prior	New	Change	New	Total
Hardware	443,575	473,575	30,000	377,150	377,150	-	309,000	339,000	30,000	282,750	362,750	80,000	538,550	2,091,025
Infrastructure	113,000	113,000	-	113,000	113,000	-	113,000	113,000	-	113,000	113,000	-	113,000	565,000
Grand Total	556,575	586,575	30,000	490,150	490,150	-	422,000	452,000	30,000	395,750	475,750	80,000	651,550	2,656,025

Capital Improvement Plan
January 2020

School Department Capital Project Request							
Project Title: Renovate Mitchell Elementary School				Fiscal Year: 2024			
Request Type:	Construction	Classification:	Building	Primary Purpose:	Public Education	Status:	Existing-Revised Project
Department:	Needham Public Schools			Useful Life:	More than 30 Years	Project Cost:	\$120,824,100
How was the Project Cost Determined:		Hired Consultant		Budget Impact:	May increase annual operating expenses by more than \$100,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Not Applicable	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						Yes	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						Yes	
18. If funded, will this project increase the operating expense for any other department?						Yes	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		4		Project Description and Considerations			
Project Budget Elements		Project Budget		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 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. During construction, the school would occupy swing space at Hillside School.			
Planning/Feasibility							
Design/Engineering		\$16,782,000					
Land/ROW Acquisition							
Site Preparation							
Construction		\$96,497,400					
Construction Management		\$4,195,500					
Equipment							
Furniture, Fixtures, and Equipment		\$3,349,200					
Technology							
Other Expenses							
TOTAL		\$120,824,100					

Capital Improvement Plan January 2020

School Department Capital Project Request			
Project Title:	Renovate Mitchell Elementary School	Fiscal Year:	2024

Supplemental Information

A possible schedule for the Mitchell Elementary School Renovation project is shown below, based on Needham's experience with the Hillside Renovation Project with MSBA. A parallel project to update the Hillside Elementary School as swing space is presented separately. The total cost of the project may vary from the existing estimates, based on the combined scope and MSBA's participation in the Mitchell project development.

Potential Schedule

Submit SOI to MSBA (FY21) - Feb '21 - Apr '21
 MSBA Board Meeting to Vote SOI (FY21-22) - April '21 - Aug '21
 Feasibility (FY22-23)
 Funding (FY22) - Oct '21 - STM
 Designer Selection with MSBA (FY22) - Nov '22 - Mar '22
 Feasibility Study (19 Months) (FY22-23) - Mar '22 - Jun '23
 PDP (FY22-23) - Mar '22 - Aug '22
 PSR (FY23) - Sept '22 - Jan '23
 MSBA Board Meeting to Accept Feasibility (FY23) - Jan '23
 Schematic Design Mitchell (FY23-24)
 Schematic Design (FY23) - Jan '23 - June '23
 DRT Review (FY23) - Feb '23
 MSBA/DESE Review (FY23) - May '23 - June '23
 Submit Schematic Design to MSBA (FY23) - June '23
 Needham Boards Approve Schematic Design (FY23-24) - June '23 - Aug '23
 MSBA Board Meeting to Approve Schematic Design (FY24) - July '23/Aug '23

Project Funding (FY24)

Submit Ballot Question to Secretary of State (FY24) - Aug '23
 Special Town Meeting (FY24) - Oct '23
 Override Ballot Question (FY24) - Nov '23
 Project Funding Agreement (FY24) - Nov '23 - Dec '23
 Design Development (FY24)
 Design Development & Review (FY24) - Dec '23 - May '24
 MSBA Review & Approval (FY24) - May '24 - June '24
 Construction Documents
 60% Submittal to MSBA (FY25) - July '24 - Oct '24
 90% Submittal to MSBA (FY25) - Nov '24 - Jan '25
 Completion of Construction Docs (FY25) - Jan '25 - Mar '25
 Bidding Documents/ Procurement (FY25) - Apr '25 - July '25
 Mitchell Occupies Hillside 9FY26-FY27) - Aug '25 - July '27
 Construction (FY26-27) - Aug '25 - Aug '27
 New Building Opens (FY28) - Sept '27

Project Budget:

All costs include escalation to the mid-point of construction, using 6%/year (FY14-FY16), 5.0%/year (FY17-18), 10.0%/year (FY19-20), and 8%/year thereafter.

This project is revised from the previous request to push the project time table back one year, to reflect the anticipated completion of the School Master Plan study in June 2020, the final recommendations from which will shape the final scope and budget for this project. According to the PPBC, it is possible that the final design budget may 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 an FF&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.

Extend Useful Life: See above narrative.

Other Departmental Assistance: PPBC Project Management

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.

FTE: Estimate 2.0 Additional Custodians; 2.0 Additional Crossing Guards.

Capital Improvement Plan January 2020

School Department Capital Project Request								
Project Title: Renovate Mitchell Elementary School		Fiscal Year: 2024						
<u>Project Budget Detail:</u>								
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 2026 (FY27)								
82,227 SF Building		Feasibility	Construction*	A/E	FF&E	Constr Mgnt	Total	Cost/SF
FY14 Project Cost (D&W) - Mitchell		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	650,000	36,868,538	6,411,864	1,279,632	1,602,966	46,813,000	\$569
6.00%	FY16 Cost Multiplier	650,000	39,080,651	6,796,576	1,356,410	1,699,144	49,582,780	\$603
5.00%	FY17 Cost Multiplier	650,000	41,034,683	7,136,404	1,424,230	1,784,101	52,029,419	\$633
5.00%	FY18 Cost Multiplier	650,000	43,086,417	7,493,224	1,495,442	1,873,306	54,598,390	\$664
10.00%	FY19 Cost Multiplier	650,000	47,395,059	8,242,547	1,644,986	2,060,637	59,993,229	\$730
10.00%	FY20 Cost Multiplier	650,000	52,134,565	9,066,802	1,809,485	2,266,700	65,927,552	\$802
8.00%	FY21 Cost Multiplier	650,000	56,305,330	9,792,146	1,954,244	2,448,036	71,149,756	\$865
8.00%	FY22 Cost Multiplier	650,000	60,809,757	10,575,517	2,110,583	2,643,879	76,789,736	\$934
8.00%	FY23 Cost Multiplier	650,000	65,674,537	11,421,559	2,279,430	2,855,390	82,880,915	\$1,008
8.00%	FY24 Cost Multiplier	650,000	70,928,500	12,335,284	2,461,784	3,083,821	89,459,389	\$1,088
8.00%	FY25 Cost Multiplier	650,000	76,602,780	13,322,106	2,658,727	3,330,527	96,564,140	\$1,174
8.00%	FY26 Cost Multiplier	650,000	82,731,003	14,387,875	2,871,425	3,596,969	104,237,271	\$1,268
8.00%	FY27 Cost Multiplier	650,000	89,349,483	15,538,905	3,101,139	3,884,726	112,524,253	\$1,368
8.00%	FY28 Cost Multiplier	650,000	96,497,441	16,782,017	3,349,230	4,195,504	121,474,193	\$1,477
13 Years	TOTAL PROJECT COST	650,000	96,497,441	16,782,017	3,349,230	4,195,504	121,474,193	\$1,477
	TOTAL COST (ROUNDED)	650,000	96,497,400	16,782,000	3,349,200	4,195,500	121,474,200	\$1,477
* Excludes modular temporary classrooms								
Square Footage		82,227						
		Oct '21 STM FY22	Oct '23 STM FY24	FY25	Total			
	Feasibility	650,000			650,000			
	Arch/Engineering		16,782,000		16,782,000			
	Construction	0	96,497,400		96,497,400			
	Construction Management		4,195,500		4,195,500			
	FF&E		3,349,200	0	3,349,200			
	Total	650,000	120,824,100	-	121,474,100			

Capital Improvement Plan
January 2020

School Department Capital Project Request							
Project Title: School Copiers						Fiscal Year: 2025	
Request Type:	Acquisition	Classification:	Equipment	Primary Purpose:	Public Education	Status:	Existing-Revised Project
Department:	Needham Public Schools			Useful Life:	More than 5 Years	Project Cost:	\$85,920
How was the Project Cost Determined:		Industry References		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		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. For more information, please see below.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment		\$85,920					
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$85,920					

Capital Improvement Plan
January 2020

School Department Capital Project Request

Project Title: School Copiers

Fiscal Year:

2025

Supplemental Information

Currently the School Department owns 42 copy machines. The FY21-FY25 request replaces the following numbers of copy machines:

Fiscal Year	#of Copy Machines Replaced		
FY21 (Requested)	7	FY24 (Requested)	4
FY22 (Requested)	7	FY25 (Requested)	6
FY23 (Requested)	5		

Copier replacement is planned on a life-cycle basis, which projects when a copier should be replaced based on actual usage and the manufacturer's total estimated capacity. As a result, copiers which are heavily used, are replaced more frequently than copiers that are lightly used. The average life cycle is calculated at 7 years, although planned replacement ages range from 5 - 9 years, depending on use. (The baseline industry assumed lifespan for copiers is five years for a typical floor-standing copiers. At maximum, high-end copiers and floor standing models that are not used often may last up to 7-10 years.) It is important to replace these machines regularly, even if they have not yet reached maximum copy allowances, given the additional operating expense associated with servicing and maintaining older equipment, as well as the difficulty in obtaining replacement parts. This analysis also assumes that copiers are re-deployed around the District as needed, to better match projected usage with equipment capacity.

The request is revised from the prior year submission to include:

* A new, fifth year replacement cycle (of \$85,920 for six copiers.)

* The addition of four copiers in FY21-24, based on the updated life cycle replacement cycle calculation, for a total of \$59,680.

Building	Location	Make	Model	Purchase Year	Age At Repl	FY20	FY21	FY22	FY23	FY24	FY25	FY20	FY21	FY22	FY23	FY24	FY25
Administration	2nd Floor	Konica	KM 658E	2018	6.00	21%	32%	43%	54%	64%	11%	-	-	-	-	12,740	-
Administration	Production Center	Konica	KM 1100	2020	6.00	REPL	10%	20%	29%	39%	49%	23,084	-	-	-	-	-
Administration	1st Floor	Konica	KM 454E	2017	6.00	49%	64%	79%	94%	15%	30%	-	-	-	7,420	-	-
Administration	Production Center	XEROX	D125	2012	6.00	36%	54%	71%	89%	107%	18%	-	-	-	-	44,700	-
Broadmeadow	Teachers' Room	Konica	KM 808	2020	5.00	REPL	20%	39%	59%	79%	98%	11,950	-	-	-	-	15,260
Broadmeadow	Main Office	Konica	KM 654E	2014	8.00	49%	58%	67%	9%	18%	27%	-	-	11,550	-	-	-
NHS	Main Office	Konica	KM 364E	2015	6.00	156%	167%	11%	22%	33%	44%	-	4,910	-	-	-	-
Broadmeadow	ETC	Konica	KM 227	2020	6.00	REPL	13%	26%	40%	53%	66%	3,500	-	-	-	-	-
NHS	Athletics	Konica	KM 454E	2016	6.00	67%	84%	100%	16%	33%	49%	-	-	7,070	-	-	-
NHS	Math/Sci Rm 205	Konica	KM 654E	2017	7.00	42%	58%	73%	89%	105%	16%	-	-	-	-	12,740	-
NHS	World Lang 704	Konica	KM 654E	2014	7.00	116%	133%	17%	35%	52%	69%	-	11,000	-	-	-	-
NHS	Health Office 607	Konica	KM 227	2020	7.00	REPL	5%	3%	5%	8%	11%	4,249	-	-	-	-	-
NHS	Music	Konica	KM 654E	2016	9.00	26%	32%	38%	44%	50%	56%	-	-	-	-	-	13,380
NHS	Guidance	Konica	KM 364E	2014	8.00	67%	75%	83%	32%	40%	48%	-	-	5,160	-	-	-
NHS	Media Center	Konica	KM 454E	2014	8.00	75%	78%	81%	3%	6%	9%	-	-	7,070	-	-	-
NHS	Sped 801	Konica	KM 458E	2018	8.00	17%	25%	34%	42%	51%	59%	-	-	-	-	-	-
NHS	SS/English 703	Konica	KM 754E	2014	7.00	107%	118%	33%	44%	55%	66%	-	12,550	-	-	-	-
NHS	Eng/SS	Konica	KM 808	2020	5.00	REPL	26%	53%	79%	106%	132%	11,950	-	-	-	-	15,260
NHS	Grade Level	Konica	KM 368E	2020	7.00	REPL	13%	27%	40%	53%	67%	4,675	-	-	-	-	-
NHS	Math/Sci	Konica	KM 808	2020	5.00	REPL	31%	63%	94%	125%	157%	11,950	-	-	-	-	15,260
Williams	Main Office	Konica	KM 458E	2019	7.00	REPL	8%	15%	23%	31%	39%	-	-	-	-	-	-

Capital Improvement Plan
January 2020

School Department Capital Project Request

												Fiscal Year:						2025
Project Title: School Copiers																		
Williams	Downstairs	Konica	KM 458E	2019	7.00	REPL	10%	19%	29%	39%	48%	-	-	-	-	-	-	-
Williams	Main Office	Konica	KM 658E	2019	5.00	REPL	24%	48%	73%	97%	121%	-	-	-	-	-	13,380	-
Mitchell	Back Hallway	Konica	KM 654E	2017	7.00	36%	49%	63%	76%	90%	14%	-	-	-	-	12,740	-	-
Mitchell	Front Office	Konica	KM 654E	2014	7.00	128%	146%	18%	36%	54%	72%	-	11,000	-	-	-	-	-
Newman	Front Office	Konica	KM 458E	2020	6.00	REPL	15%	30%	46%	61%	76%	6,410	-	-	-	-	-	-
Newman	Hall Outside Office	Konica	KM 654E	2016	7.00	61%	75%	89%	104%	14%	29%	-	-	-	12,130	-	-	-
Newman	Hallway Near Café	Konica	KM 654E	2017	7.00	44%	61%	79%	96%	17%	35%	-	-	-	12,130	-	-	-
Newman	Down Stairs Hall	Konica	KM 558E	2018	7.00	30%	45%	59%	74%	89%	104%	-	-	-	-	-	13,380	-
Science Center	Science Center	Konica	KM 227	2020	7.00	REPL	5%	10%	14%	19%	24%	3,500	-	-	-	-	-	-
Pollard	8th Grade Hallway	Konica	KM 654E	2015	7.00	88%	108%	128%	20%	40%	60%	-	-	11,550	-	-	-	-
Pollard	Modulars	Konica	KM 754E	2014	8.00	46%	54%	62%	8%	16%	24%	-	-	13,180	-	-	-	-
Pollard	Main Office	Konica	KM 808	2020	7.00	REPL	17%	34%	51%	67%	84%	11,950	-	-	-	-	-	-
Pollard	7th Grade Work Area	Konica	KM 654E	2014	8.00	93%	103%	113%	10%	20%	30%	-	-	11,550	-	-	-	-
Pollard	Teachers Lounge	Konica	KM 454E	2017	5.00	75%	102%	26%	53%	79%	105%	-	6,730	-	-	-	-	-
High Rock	Room 207	Konica	KM 654E	2016	7.00	47%	58%	69%	80%	11%	22%	-	-	-	12,130	-	-	-
High Rock	Main Office	Konica	KM 754E	2014	7.00	104%	119%	16%	31%	47%	62%	-	12,550	-	-	-	-	-
Eliot	Main Office	Konica	KM 754E	2014	9.00	69%	77%	85%	93%	8%	16%	-	-	-	13,840	-	-	-
Eliot	Room 151	Konica	KM 658E	2018	8.00	17%	25%	34%	42%	50%	59%	-	-	-	-	-	-	-
Eliot	Room 210	Konica	KM 458E	2018	8.00	27%	40%	54%	67%	81%	94%	-	-	-	-	-	-	-
NCE Day Care	Main Office	XEROX	WC3550 X	2012	9.00	50%	58%	8%	16%	24%	32%	-	3,680	-	-	-	-	-
Administration	Production/Color	Konica	KM C3070L	2020	6.00	REPL	11%	21%	32%	42%	53%	36,772	-	-	-	-	-	-
Average Age Year of Replacement / Count of Machines						Average	6.88	11	7	7	5	4	6					
Totals												129,990	62,420	67,130	57,650	82,920	85,920	

Capital Improvement Plan
January 2020

School Department Capital Project Request								
Project Title:		School New and Replacement Furniture				Fiscal Year:		2025
Request Type:	Acquisition	Classification:	Equipment	Primary Purpose:	Public Education	Status:	Existing Project	
Department:	Needham Public Schools			Useful Life:	More than 20 Years	Project Cost:	\$25,000	
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000			
Parameters						Response		
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?							No	
3. Does this project require any permitting by any Town or State agency?							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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							No	
12. Is this a request in response to a Court, Federal, or State order?							No	
13. Is this a request in response to a documented public health or safety condition?							No	
14. Is this a request to improve or make repairs to extend the useful life of a building?							No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No	
17. Will any other department be required to provide assistance in order to complete the project?							No	
18. If funded, will this project increase the operating expense for any other department?							No	
19. If funded, will additional permanent staff be required?							No	
Total New FTE's:		<u>Project Description and Considerations</u>						
Project Budget Elements		Project Budget		In FY05 Town Meeting approved funding of \$20,500 to begin the replacement of furniture in poor and fair condition throughout the School Department. By FY15, all furniture in 'poor' condition was replaced in the schools. The FY21-FY25 funding request will continue with the replacement of furniture in 'fair' condition at Pollard and provide funding for new classroom furniture as needed. A breakdown of the funding request is found below: FY21: \$35,000 * \$10,000 to conclude the replacement of furniture at Pollard Middle School in 'fair' condition * \$25,000 to purchase new classroom furniture as needed for new enrollment or replacement purposes. FY22 - FY25: \$25,000/year * \$25,000 to purchase new classroom furniture as needed for new enrollment or replacement purposes.				
Planning/Feasibility								
Design/Engineering								
Land/ROW Acquisition								
Site Preparation								
Construction								
Construction Management								
Equipment		\$25,000						
Furniture, Fixtures, and Equipment								
Technology								
Other Expenses								
TOTAL		\$25,000						

Capital Improvement Plan
January 2020

School Department Capital Project Request

Project Title: School New and Replacement Furniture

Fiscal Year: 2025

Supplemental Information

The anticipated furniture replacement schedule is depicted below:

Funding Plan	Request FY21	Request FY22	Request FY23	Request FY24	Request FY25	Total
Pollard	\$10,000					\$10,000
New Classrooms	<u>\$25,000</u>	<u>\$25,000</u>	<u>\$25,000</u>	<u>\$25,000</u>	<u>\$25,000</u>	<u>\$125,000</u>
Total	\$35,000	\$25,000	\$25,000	\$25,000	\$25,000	\$135,000

Capital Improvement Plan
January 2020

School Department Capital Project Request						
Project Title: School Department Technology Request					Fiscal Year: 2025	
Request Type:	Acquisition	Classification:	Technology	Primary Purpose:	Public Education	Status: Existing-Revised Project
Department:	Needham Public Schools			Useful Life:	More than 5 Years	Project Cost: \$651,550
How was the Project Cost Determined:		Industry References		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000	
Parameters					Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?					No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?					No	
3. Does this project require any permitting by any Town or State agency?					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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?					Not Applicable	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?					No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?					No	
12. Is this a request in response to a Court, Federal, or State order?					No	
13. Is this a request in response to a documented public health or safety condition?					No	
14. Is this a request to improve or make repairs to extend the useful life of a building?					No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?					No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?					No	
17. Will any other department be required to provide assistance in order to complete the project?					No	
18. If funded, will this project increase the operating expense for any other department?					No	
19. If funded, will additional permanent staff be required?					No	
Total New FTE's:		0		Project Description and Considerations		
Project Budget Elements		Project Budget		The FY21-25 CIP request funds the purchase of School Department technology, including desktop computers, printers, classroom audio visual devices, specialized instructional labs, projectors, video displays, security cameras and electronic door access controllers. The request also incorporates funding for school technology infrastructure, which consists of servers, network hardware, wireless infrastructure, data cabling and access points. This request reflects the School Department's classroom technology standard and the decision in FY17 to move devices with a lifespan of less than five years (Digital Learning Devices, or DLDs, and staff laptops) to the operating budget. A chart summarizing the five-year (FY21-25) request is included below. See below for additional information.		
Planning/Feasibility						
Design/Engineering						
Land/ROW Acquisition						
Site Preparation						
Construction						
Construction Management						
Equipment						
Furniture, Fixtures, and Equipment						
Technology		\$651,550				
Other Expenses						
TOTAL		\$651,550				

Capital Improvement Plan January 2020

School Department Capital Project Request			
Project Title:	School Department Technology Request	Fiscal Year:	2025

Supplemental Information

The FY21-25 Capital Improvement Plan (CIP) for school technology totals \$2,656,025 and includes \$2,091,025 for school hardware replacement and \$565,000 for school technology infrastructure. The request is similar to the prior submission, with the following exceptions:

- * \$651,550 in new, fifth-year (FY25) technology purchases, including \$538,550 for hardware replacement and \$113,000 for technology infrastructure.
- * The addition of \$120,000 to replace paging clocks/ aiphone technology in the first four years of the plan (FY21-24.) (The total request across all five years is \$150,000.)
- * A \$60,000 reduction to the cost of NHS TV studio equipment replacement in the first four years of the plan (FY21-24), reflecting cost savings realized from in-house versus outsourced construction and project coordination with Needham Channel.

The FY21 request is for \$586,575, an increase of \$30,000 from the FY21 projection included in the FY20-24 CIP. The \$586,575 total request includes \$473,575 for hardware and \$113,000 for infrastructure replacement. The FY21 request is unchanged from the prior year, with the exception of the following:

- * The addition of \$30,000 to replace paging clocks/ aiphone technology.

The FY22-25 CIP increases \$761,550 over the prior CIP, to add a new fifth year to the plan (@ \$651,550) and provide \$110,000 in net new funding during the first four years for the following items:

- * The addition of \$90,000 to replace paging clocks/ aiphone technology in FY22-24, which is offset by a \$60,000 reduction in the cost of NHS TV studio equipment replacement, for a net additional expense of \$30,000.
- * \$32,000 in additional funds to support replacement of the Pollard Lecture Hall projector in FY24.
- * \$48,000 in additional funds to support classroom AV/projector replacement in FY24 at the Mitchell (\$18,000) and NHS (\$30,000.)

Parameters Addressed:

Technology: The School Technology department supports this request.

A detailed breakout of changes from the prior year's FY21-24 request is highlighted below.

Summary	FY21	FY21	FY21	FY22	FY22	FY22	FY23	FY23	FY23	FY24	FY24	FY24	FY25	FY21-25
All Hardware (Including New Requests)	Prior	New	Change	Prior	New	Change	Prior	New	Change	Prior	New	Change	New	Total
Lab Computers	202,500	202,500	-	162,000	162,000	-	162,000	162,000	-	40,500	40,500	-	46,000	613,000
Science Lab Computers	-	-	-	-	-	-	-	-	-	-	-	-	54,000	54,000
TV Studio Computers	-	-	-	-	-	-	36,000	36,000	-	-	-	-	-	36,000
Graphics Lab Computers	-	-	-	-	-	-	-	-	-	44,000	44,000	-	-	44,000
Desktop Computers	106,500	106,500	-	21,000	21,000	-	21,000	21,000	-	21,000	21,000	-	116,000	285,500
Printers	20,075	20,075	-	37,650	37,650	-	-	-	-	-	-	-	22,550	80,275
Classroom AV/ Projection	80,000	80,000	-	110,000	110,000	-	90,000	90,000	-	80,000	128,000	48,000	240,000	648,000
Gym/ Performance Center Projection /Screen	-	-	-	-	-	-	-	-	-	18,000	50,000	32,000	-	50,000
NHS TV Studio	30,000	30,000	-	30,000	-	(30,000)	-	-	-	30,000	-	(30,000)	30,000	60,000
Paging Clocks/ Aiphone	-	30,000	30,000	-	30,000	30,000	-	30,000	30,000	-	30,000	-	30,000	150,000
Security Cameras	4,500	4,500	-	16,500	16,500	-	-	-	-	49,250	49,250	-	-	70,250
Subtotal	443,575	473,575	30,000	377,150	377,150	-	309,000	339,000	30,000	282,750	362,750	80,000	538,550	2,091,025

Capital Improvement Plan
January 2020

School Department Capital Project Request														
Project Title: School Department Technology Request												Fiscal Year:		
Summary	FY21	FY21	FY21	FY22	FY22	FY22	FY23	FY23	FY23	FY24	FY24	FY24	FY25	FY21-25
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	FY21	FY21	FY21	FY22	FY22	FY22	FY23	FY23	FY23	FY24	FY24	FY24	FY25	FY21-25
Grand Total	Prior	New	Change	Prior	New	Change	Prior	New	Change	Prior	New	Change	New	Total
Hardware	443,575	473,575	30,000	377,150	377,150	-	309,000	339,000	30,000	282,750	362,750	80,000	538,550	2,091,025
Infrastructure	113,000	113,000	-	113,000	113,000	-	113,000	113,000	-	113,000	113,000	-	113,000	565,000
Grand Total	556,575	586,575	30,000	490,150	490,150	-	422,000	452,000	30,000	395,750	475,750	80,000	651,550	2,656,025

Capital Improvement Plan
January 2020

School Department Capital Project Request							
Project Title: Pollard School Improvements						Fiscal Year: 2028	
Request Type:	Construction	Classification:	Building	Primary Purpose:	Public Education	Status:	Existing-Revised Project
Department:	Needham Public Schools			Useful Life:	More than 30 Years	Project Cost:	\$650,000
How was the Project Cost Determined:		Hired Consultant		Budget Impact:	May increase annual operating expenses by more than \$100,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Not Applicable	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						Yes	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						Yes	
18. If funded, will this project increase the operating expense for any other department?						Yes	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		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			
Planning/Feasibility		\$650,000					
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$650,000					

Capital Improvement Plan
January 2020

School Department Capital Project Request			
Project Title:	Pollard School Improvements	Fiscal Year:	2028

Supplemental Information

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.

Capital Improvement Plan
January 2020

School Department Capital Project Request

Project Title: Pollard School Improvements

Fiscal Year: 2028

Preliminary Project Schedule:

Feasibility Study: FY28
Schematic Design/Project Funding Year: FY29
Pollard Moves to Swing Space: FY30
Construction: FY30-31
Renovated School Opens: September 2031 (FY32)

Preliminary Budget:

Project costs based on Dore & Whittier Facilities Assessment, 2014. The total project cost is updated to reflect the following cost escalator factors: 6%/year (FY14-FY16), 5.0%/year (FY17-18), 10.0%/year (FY19-20), and 8%/year thereafter. The preliminary 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.
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.
Extend Useful Life: See above narrative.
Other Departmental Assistance: PPBC Project Management; Public Facilities Maintenance & Custodial.
Operating Budget Increase for Another Department: See above.

This project is revised from the previous request to push the project time table back one year, to reflect the anticipated completion of the School Master Plan study in June 2020, the final recommendations from which will shape the final scope and budget for this project. According to the PPBC, it is possible that the final design budget may 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.

Capital Improvement Plan
January 2020

School Department Capital Project Request			
Project Title:	Pollard School Improvements	Fiscal Year:	2028

Project Budget Detail:

Pollard Improvements
Dore & Whittier, Comprehensive Facilities Assessment, 2014

<u>From Condition Assessment - Pollard Long-Term Improvements</u>		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 Classroom 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		
General Conditions Allowance	1,780,524	10% of construction	6.00%	FY15 & FY16
Escalation to Mid Point of Construction	43,794,448	15 Yrs to 2030	5.00%	FY17 & FY18
Subtotal A Construction	63,380,206		10.00%	FY19 & FY20
			8.00%	After FY20
Bonds	633,802	1% of Subtotal A		
Insurance	633,802	1% of Subtotal A		
Subtotal B Construction	64,647,811			
Fee	534,157	3% of Condition Assessment Cost		
Design & Pricing	9,697,172	15% of Subtotal B		
Total Construction Cost	74,879,139			

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

Assume
Feasibility Funding Year - FY28
Project Funding Year - FY29
Midpt of Constr - FY30 (15 Years Escalation)

Capital Improvement Plan
January 2020

School Department Capital Project Request				
Project Title:	Pollard School Improvements		Fiscal Year:	2028
Project Contingency - Construction	11,231,871	15% of Total Construction		
Project Contingency - Owner	3,743,957	5% of Total Construction		
Subtotal Contingency	14,975,828			
Soft Cost (OPM, A/E, Survey, etc)	18,719,785	25% of Total Construction		
FF&E	-			
Total	108,574,752			
<u>Summary</u>				
Construction Cost	74,879,139			
Project Contingency	14,975,828			
Soft Cost	18,719,785			
FF&E	-			
Total	108,574,752	(Excluding Feasibility)		
	Total	Rounded Total		
Feasibility	650,000	650,000		
Schematic Design	14,975,828	14,975,800		
Construction	86,111,010	86,111,000		
Owners Project Contingency (Other)	3,743,957	3,744,000		
Construction Management	3,743,957	3,744,000		
Total	109,224,752	109,224,800		

Capital Improvement Plan
January 2020

School Department Capital Project Request							
Project Title: Pollard School Improvements				Fiscal Year: 2029			
Request Type:	Construction	Classification:	Building	Primary Purpose:	Public Education	Status:	Existing-Revised Project
Department:	Needham Public Schools			Useful Life:	More than 30 Years	Project Cost:	\$108,574,800
How was the Project Cost Determined:		Hired Consultant		Budget Impact:		May increase annual operating expenses by more than \$100,000	
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Not Applicable	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						Yes	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						Yes	
18. If funded, will this project increase the operating expense for any other department?						Yes	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		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.			
Planning/Feasibility							
Design/Engineering		\$14,975,800					
Land/ROW Acquisition							
Site Preparation							
Construction		\$86,111,000					
Construction Management		\$3,744,000					
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses		\$3,744,000					
TOTAL		\$108,574,800					

Capital Improvement Plan
January 2020

School Department Capital Project Request			
Project Title:	Pollard School Improvements	Fiscal Year:	2029

Supplemental Information

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.

Capital Improvement Plan
January 2020

School Department Capital Project Request

Project Title: Pollard School Improvements

Fiscal Year: 2029

Preliminary Project Schedule:

Feasibility Study: FY28
Schematic Design/Project Funding Year: FY29
Pollard Moves to Swing Space: FY30
Construction: FY30-31
Renovated School Opens: September 2031 (FY32)

Preliminary Budget:

Project costs based on Dore & Whittier Facilities Assessment, 2014. The total project cost is updated to reflect the following cost escalator factors: 6%/year (FY14-FY16), 5.0%/year (FY17-18), 10.0%/year (FY19-20), and 8%/year thereafter. The preliminary 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.
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.
Extend Useful Life: See above narrative.
Other Departmental Assistance: PPBC Project Management; Public Facilities Maintenance & Custodial.
Operating Budget Increase for Another Department: See above.

This project is revised from the previous request to push the project time table back one year, to reflect the anticipated completion of the School Master Plan study in June 2020, the final recommendations from which will shape the final scope and budget for this project. According to the PPBC, it is possible that the final design budget may 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.

Capital Improvement Plan
January 2020

School Department Capital Project Request			
Project Title:	Pollard School Improvements	Fiscal Year:	2029

Project Budget Detail:

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

		Construction		
<u>From Condition Assessment - Pollard Long-Term Improvements</u>				
1.03 Replace Corridor/Doors w Fire Rated Doors		113,880	<u>Assume</u> Feasibility - 1 year Design - 1 year Construction - 2 Years	
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	<u>Assume</u> Feasibility Funding Year - FY28 Project Funding Year - FY29 Midpt of Constr - FY30 (15 Years Escalation)	
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 Classroom 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 Sewer & Water Line Connections		153,300		
Subtotal Condition Assessment Cost		17,805,235		
General Conditions Allowance		1,780,524	10% of construction	6.00% FY15 & FY16
Escalation to Mid Point of Construction		43,794,448	15 Yrs to 2030	5.00% FY17 & FY18
Subtotal A Construction		63,380,206		10.00% FY19 & FY20
				8.00% After FY20
Bonds		633,802	1% of Subtotal A	
Insurance		633,802	1% of Subtotal A	
Subtotal B Construction		64,647,811		
Fee		534,157	3% of Condition Assessment Cost	
Design & Pricing		9,697,172	15% of Subtotal B	
Total Construction Cost		74,879,139		

Capital Improvement Plan
January 2020

School Department Capital Project Request			
Project Title:	Pollard School Improvements	Fiscal Year:	2029
Project Contingency - Construction	11,231,871	15% of Total Construction	
Project Contingency - Owner	3,743,957	5% of Total Construction	
Subtotal Contingency	14,975,828		
Soft Cost (OPM, A/E, Survey, etc)	18,719,785	25% of Total Construction	
FF&E	-		
Total	108,574,752		
<u>Summary</u>			
Construction Cost	74,879,139		
Project Contingency	14,975,828		
Soft Cost	18,719,785		
FF&E	-		
Total	108,574,752	(Excluding Feasibility)	
	Total	Rounded Total	
Feasibility	650,000	650,000	
Schematic Design	14,975,828	14,975,800	
Construction	86,111,010	86,111,000	
Owners Project Contingency (Other)	3,743,957	3,744,000	
Construction Management	3,743,957	3,744,000	
Total	109,224,752	109,224,800	

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Data Center Servers						Fiscal Year: 2025	
Request Type:	Acquisition	Classification:	Technology	Primary Purpose:	General Government	Status:	New Request
Department:	Finance			Useful Life:	More than 5 Years	Project Cost:	\$475,000
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	May increase annual operating expenses between \$5,001 and \$25,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						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?						Not Applicable	
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Not Applicable	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						Yes	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		This project is for the replacement of servers and storage units at two data centers. Data Center 1 is located at the Town Hall and Data 2 is located at the Public Services Administration Building. Data Center 1 is the primary data center where the Town Departments access files and programs, the internet, and network and internet security take place. The servers at Town Hall are physical servers that maintain and support over 100 virtual servers with corresponding data maintained on the storage units. Other servers are for specific software functions. The servers and storage units at the Public Services Administration Building act as fail over in case of the Town Hall network and infrastructure going offline as well as for public safety specific operations that interact with State and Federal agencies. Because of the new Public Safety Buildings and technology associated with their construction as well as systems needed for redundancy and resiliency there have been increases to the number of servers and storage units required across both data centers.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology		\$475,000					
Other Expenses							
TOTAL		\$475,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Data Center Servers	Fiscal Year:	2025

Supplemental Information

The Information Technology Center has eliminated the need for a third Data Center which was housed at the Public Services Administration Building. That server room will continue to be used for switching and server storage for minor operations prior to backup.

In the past, the Information Technology Center (ITC) has reviewed the data centers hardware and design to determine if shifting to a hyper-converged environment would be financially viable moving forward, based on the fiscal year dollar requests in previous years. After speaking with several vendors, the department determined that the current cost of this architecture was too costly for use by the Town. However that does not mean that in the future as the Information Technology Center moves closer to this request that they will not revisit this technology. The ITC has also been moving forward with offsite options for cloud backup to support business continuity and disaster recovery. The overall goal is to minimize 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. The difficulty in this move is that the operating costs of moving hardware to a cloud environment have proven to be fiscally challenging. The dollars to operate servers and storage in the cloud is expensive and has not proven in concept to be less expensive than purchasing and managing these on site. Another issue that the Information Technology Center has found is that in some cases ,software being used by Town departments requires hybrid solutions which means running servers in the cloud and locally. The Information Technology Center ITC uses a five year replacement model for infrastructure hardware.

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 and disaster recovery. 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. By replacing both data center servers and storage at one time ensures that all hardware is current with operating systems which allows for better integration with supported software across the enterprise.

Clarification of Questions

4. The ITC submitted this request.

10. There are currently ITC operating budget dollars used for licensing for the both hardware and software maintenance and support. However they may be some increase to the operating budget based what integration requirements for the servers and storage at that time.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: GIS Technology Systems and Applications						Fiscal Year: 2023	
Request Type:	Acquisition	Classification:	Technology	Primary Purpose:	General Government	Status:	Existing Project
Department:	Finance			Useful Life:	More than 5 Years	Project Cost:	\$120,000
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?							No
3. Does this project require any permitting by any Town or State agency?							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?							Not Applicable
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							Not Applicable
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							No
12. Is this a request in response to a Court, Federal, or State order?							No
13. Is this a request in response to a documented public health or safety condition?							No
14. Is this a request to improve or make repairs to extend the useful life of a building?							No
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							No
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No
17. Will any other department be required to provide assistance in order to complete the project?							No
18. If funded, will this project increase the operating expense for any other department?							No
19. If funded, will additional permanent staff be required?							No
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		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.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology		\$120,000					
Other Expenses							
TOTAL		\$120,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	GIS Technology Systems and Applications	Fiscal Year:	2023
<u>Supplemental Information</u>			

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 including 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 as possible. 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.

Revision

An revisions of \$20,000 was added to the total cost of the request. This request was originally based on dollars requested for the two previous flights and planimetric collection. One request was made during the 2008 economic downturn and companies that perform the work to capture imagery and planimetrics were doing anything they could to generate business and costs were lower than usual. However between then and the next request there were consolidations in the industry and with less competition, the costs were higher than normal. This revision better represents the dollars needed to capture both the imagery and planimetric data.

Clarification of Questions

4. The ITC submitted this request.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: High Availability Firewalls						Fiscal Year: 2022	
Request Type:	Acquisition	Classification:	Technology	Primary Purpose:	General Government	Status:	Existing Project
Department:	Finance			Useful Life:	More than 5 Years	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		
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?							Not Applicable
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							Not Applicable
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							Yes
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							No
12. Is this a request in response to a Court, Federal, or State order?							No
13. Is this a request in response to a documented public health or safety condition?							No
14. Is this a request to improve or make repairs to extend the useful life of a building?							No
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							No
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No
17. Will any other department be required to provide assistance in order to complete the project?							No
18. If funded, will this project increase the operating expense for any other department?							No
19. If funded, will additional permanent staff be required?							No
Total New FTE's:		0	Project Description and Considerations				
Project Budget Elements		Project Budget		Currently the Town uses multiple firewalls to control traffic and access to different networks managed by the ITC. The meaning of high availability is that there are multiple firewalls per network in case of a failure of the single piece of hardware. These firewalls are used to separate out the current water SCADA network, the downtown traffic intersection network, the public safety network, and the municipal working network. These firewalls also allow the ITC to give external access to employees and consultants who are working away from Town hall and need to work within any of these specific networks. The Town has migrated to a 10GB network which increases the cost of these pieces of hardware. All of the current hardware is close to five years old and should be part of the five year replacement cycle. This request will have them closer to eight years old when they are replaced.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology		\$75,000					
Other Expenses							
TOTAL		\$75,000					

Capital Improvement Plan
January 2020

Capital Project Request

Project Title: High Availability Firewalls

Fiscal Year: 2022

Supplemental Information

Clarification of Questions

4. The ITC submitted this request.

10. There are currently ITC operating budget dollars used for licensing for the both hardware and software maintenance and support.

Capital Improvement Plan
January 2020

Capital Project Request								
Project Title:		Multi-Function Printer Devices				Fiscal Year:		2021
Request Type:	Construction	Classification:	Technology	Primary Purpose:	General Government	Status:	Existing Project	
Department:	Finance			Useful Life:	More than 5 Years	Project Cost:	\$35,600	
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	May increase annual operating expenses between \$5,001 and \$25,000			
Parameters						Response		
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?							No	
3. Does this project require any permitting by any Town or State agency?							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?							Not Applicable	
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							Not Applicable	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							No	
12. Is this a request in response to a Court, Federal, or State order?							No	
13. Is this a request in response to a documented public health or safety condition?							No	
14. Is this a request to improve or make repairs to extend the useful life of a building?							No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No	
17. Will any other department be required to provide assistance in order to complete the project?							No	
18. If funded, will this project increase the operating expense for any other department?							No	
19. If funded, will additional permanent staff be required?							No	
Total New FTE's:		0	Project Description and Considerations					
Project Budget Elements		Project Budget						
Planning/Feasibility		This is the third phase of a four phase project to replace 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.						
Design/Engineering								
Land/ROW Acquisition								
Site Preparation								
Construction								
Construction Management								
Equipment								
Furniture, Fixtures, and Equipment								
Technology								
Other Expenses		\$35,600						
TOTAL		\$35,600						

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Multi-Function Printer Devices	Fiscal Year:	2021

Supplemental Information

The first two phases, each at a cost of \$35,600, saw the delivery of three devices to Town Hall and two devices to the Public Services Administration Building. This phase will see devices delivered to the Public Services Administration Building and the Center at The Heights. The current objective of this project is to have all the devices be similar in make and model to help in reducing the overall cost of consumables. By having multiple devices across Town building be the same make and model the Information Technology Center does not have to maintain an inventory of different manufacturers consumables. These devices have been and will continue to be purchased through the State of Massachusetts COMMBUYS program which includes a per sheet printed cost to cover maintenance and consumables.

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 until replacement it is difficult to give an actual make and model that would be purchased.

Clarification of Questions

7. Based on the annual cost of the past three phases there will be some addition to the operating budget to cover the per sheet printed cost for maintenance and consumables. Some of these cost will be offset by moving dollars from the Technology Computer Supplies and Equipment line item to the Technology Repairs and Maintenance line item.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Multi-Function Printer Devices						Fiscal Year: 2022	
Request Type:	Construction	Classification:	Technology	Primary Purpose:	General Government	Status:	Existing Project
Department:	Finance	Useful Life:	More than 5 Years	Project Cost:	\$35,600		
How was the Project Cost Determined:		In-House Estimate	Budget Impact:	May increase annual operating expenses between \$5,001 and \$25,000			
Parameters				Response			
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?				No			
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?				No			
3. Does this project require any permitting by any Town or State agency?				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?				Not Applicable			
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?				Not Applicable			
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?				No			
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?				No			
12. Is this a request in response to a Court, Federal, or State order?				No			
13. Is this a request in response to a documented public health or safety condition?				No			
14. Is this a request to improve or make repairs to extend the useful life of a building?				No			
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?				No			
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?				No			
17. Will any other department be required to provide assistance in order to complete the project?				No			
18. If funded, will this project increase the operating expense for any other department?				No			
19. If funded, will additional permanent staff be required?				No			
Total New FTE's:		0	Project Description and Considerations				
Project Budget Elements		Project Budget		This is the last phase of a four phase project to replace 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.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology		\$35,600					
Other Expenses							
TOTAL		\$35,600					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Multi-Function Printer Devices	Fiscal Year:	2022

Supplemental Information

The first three phases, each at a cost of \$35,600, saw the delivery of three devices to Town Hall and two devices to the Public Services Administration Building. This phase will see devices delivered to the Town Hall and the Center at The Heights. The current objective of this project is to have all the devices be similar in make and model to help in reducing the overall cost of consumables. By having multiple devices across Town building be the same make and model the Information Technology Center does not have to maintain an inventory of different manufacturers consumables. Originally it was thought that this request would include replacement of Public Safety Building/Fire Station 2 equipment however new equipment is part of the overall capital project for the new Public Safety Building/Fire Station 2. These devices have been and will continue to be purchased through the State of Massachusetts COMMBUYS program which includes a per sheet printed cost to cover maintenance and consumables.

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.

Clarification of Questions

7. Based on the annual cost of the past three phases there will be some addition to the operating budget to cover the per sheet printed cost for maintenance and consumables. Some of these cost will be offset by moving dollars from the Technology Computer Supplies and Equipment line item to the Technology Repairs and Maintenance line item.

Capital Improvement Plan
January 2020

Capital Project Request								
Project Title:		Public Safety Mobile Devices Replacement				Fiscal Year:		2022
Request Type:	Acquisition	Classification:	Technology	Primary Purpose:		Status:	Existing Project	
Department:	Finance	Useful Life:	More than 5 Years	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			
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?								
Not Applicable								
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?								
Not Applicable								
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?								
Yes								
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?								
No								
12. Is this a request in response to a Court, Federal, or State order?								
No								
13. Is this a request in response to a documented public health or safety condition?								
No								
14. Is this a request to improve or make repairs to extend the useful life of a building?								
No								
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?								
No								
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?								
No								
17. Will any other department be required to provide assistance in order to complete the project?								
No								
18. If funded, will this project increase the operating expense for any other department?								
No								
19. If funded, will additional permanent staff be required?								
No								
Total New FTE's:		Project Description and Considerations						
Project Budget Elements		Project Budget		This request is the first year of a two year phase 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 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 of ToughBooks and ToughTablets. In the past the hardware was funded using State 911 Grant Funds. Because of the uncertainty of the funding from the State it is important to place this within the capital request. There are currently ITC operating budget dollars used for licensing for both hardware and software maintenance and support.				
Planning/Feasibility								
Design/Engineering								
Land/ROW Acquisition								
Site Preparation								
Construction								
Construction Management								
Equipment		\$50,000						
Furniture, Fixtures, and Equipment								
Technology								
Other Expenses								
TOTAL		\$50,000						

Capital Improvement Plan
January 2020

Capital Project Request

Project Title: Public Safety Mobile Devices Replacement

Fiscal Year: 2022

Supplemental Information

The hardware purchased is designed for more intense environments than normal, the day to day usage by the officers in their vehicles is proving difficult to maintain. The equipment requires extra hardware on hand for replacement when a piece of hardware needs to be removed from a Public Safety vehicle. Each vehicle is a rolling office and the officers need to be able to access information through this hardware twenty-four hours a day, seven days a week.

Clarification of Questions

4. The ITC submitted this request.

10. There are currently ITC operating budget dollars used for licensing for both hardware and software maintenance and support.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Public Safety Mobile Devices Replacement						Fiscal Year: 2023	
Request Type:	Acquisition	Classification:	Technology	Primary Purpose:		Status:	Existing Project
Department:	Finance			Useful Life:	More than 5 Years	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		
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?						Not Applicable	
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Not Applicable	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						Yes	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:				Project Description and Considerations			
Project Budget Elements		Project Budget		This request is the second year of a two year phase 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 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 of ToughBooks and ToughTablets. In the past the hardware was funded using State 911 Grant Funds. Because of the uncertainty of the funding from the State it is important to place this within the capital request. There are currently ITC operating budget dollars used for licensing for both hardware and software maintenance and support.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment		\$50,000					
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$50,000					

Capital Improvement Plan
January 2020

Capital Project Request

Project Title: Public Safety Mobile Devices Replacement

Fiscal Year: 2023

Supplemental Information

The hardware purchased is designed for more intense environments than normal, the day to day usage by the officers in their vehicle is proving difficult to maintain. The equipment requires extra hardware on hand for replacement when a piece of hardware needs to be removed from a Public Safety vehicle. Each vehicle is a rolling office and the officers need to be able to access information through this hardware twenty-four hours a day, seven days a week.

Clarification of Questions

4. The ITC submitted this request.

10. There are currently ITC operating budget dollars used for licensing for both hardware and software maintenance and support.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Public Works Mobile Devices						Fiscal Year: 2023	
Request Type: Acquisition	Classification: Technology	Primary Purpose: Public Works		Status: Existing Project			
Department: Finance		Useful Life: More than 5 Years	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					
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?				Not Applicable			
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?				Not Applicable			
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?				Yes			
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?				No			
12. Is this a request in response to a Court, Federal, or State order?				No			
13. Is this a request in response to a documented public health or safety condition?				No			
14. Is this a request to improve or make repairs to extend the useful life of a building?				No			
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?				No			
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?				No			
17. Will any other department be required to provide assistance in order to complete the project?				No			
18. If funded, will this project increase the operating expense for any other department?				No			
19. If funded, will additional permanent staff be required?				No			
Total New FTE's: 0		Project Description and Considerations					
Project Budget Elements		Project Budget		This project is for the replacement of laptops and tablets that are used by Public Works employees. The hardware is used to access multiple applications during the daily operations of either an individual or vehicle. The hardware communicates with multiple applications depending on what division within Public Works is using the equipment. The devices themselves are a mixture of off the shelf devices and hardened military specification hardware manufactured for above normal use in more intensive environments. The current hardware is a mix of Android and Microsoft tablets as well as Panasonic ToughBooks purchased through prior CIP and operating appropriations.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment		\$50,000					
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$50,000					

Capital Improvement Plan
January 2020

Capital Project Request

Project Title: Public Works Mobile Devices

Fiscal Year: 2023

Supplemental Information

Clarification of Questions

4. The ITC submitted this request.

10. There are currently ITC operating budget dollars used for licensing for both hardware and software maintenance and support.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Town Building Security and Traffic Cameras						Fiscal Year: 2025	
Request Type:	Acquisition	Classification:	Technology	Primary Purpose:		Status:	Existing-Revised Project
Department:	Finance			Useful Life:	More than 5 Years	Project Cost:	\$350,000
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						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?						Not Applicable	
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Not Applicable	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						Yes	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:				Project Description and Considerations			
Project Budget Elements		Project Budget		This request is for the replacement and upgrade of traffic and security cameras. Traffic cameras are currently located at two intersections downtown, Great Plain at Chapel and Chestnut, Great Plain at Highland and Dedham. Security cameras are located across the Town at multiple buildings and locations. Each building with security cameras also maintains a Digital Video Recorder which are currently backed up to a storage unit in the Town Hall server room. The cameras at all of the buildings are high resolution cameras used for maintaining the security of the buildings and properties. This hardware also has a five year life cycle. Currently used at the traffic intersection are low resolution traffic control cameras. It is anticipated that in the future traffic control cameras will also be high resolution which will better help control traffic.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology		\$350,000					
Other Expenses							
TOTAL		\$350,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Town Building Security and Traffic Cameras	Fiscal Year:	2025

Supplemental Information

This project will look to replace all the cameras at one time to ensure that they are all at the same level of make and model. This will allow for a better interaction with the control software. The Information Technology Center transitioned to Avigilon access control and security software for all aspects of building access and security. Avigilon cameras are currently used at non-school Town buildings which allows the Town to use all of the functionality of the Avigilon software. It is anticipated that in the future many of the non-school Town buildings will have camera security.

Clarification of Questions

4. The ITC submitted this request.
10. There are currently ITC operating budget dollars used for licensing for both hardware and software maintenance and support.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Town Building Switchings						Fiscal Year: 2024	
Request Type:	Acquisition	Classification:	Technology	Primary Purpose:	General Government	Status:	Existing Project
Department:	Finance			Useful Life:	More than 5 Years	Project Cost:	\$60,000
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							No
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?							No
3. Does this project require any permitting by any Town or State agency?							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?							Not Applicable
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							Not Applicable
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							Yes
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							No
12. Is this a request in response to a Court, Federal, or State order?							No
13. Is this a request in response to a documented public health or safety condition?							No
14. Is this a request to improve or make repairs to extend the useful life of a building?							No
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							No
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No
17. Will any other department be required to provide assistance in order to complete the project?							No
18. If funded, will this project increase the operating expense for any other department?							No
19. If funded, will additional permanent staff be required?							No
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		Switching is an important aspect of the communications between the multiple buildings supported by the Information Technology Center (ITC). The request is to upgrade and replace switches in Town Hall, the Public Services Administration Building, and the Center at The Heights. Because of the increased data transfer speeds between the buildings, currently at 10GB, it is important to maintain the current level of switching. Many of the current switches within these buildings today are two to three years old so the replacement of them will be important in the years out. There is annual licensing and maintenance for this product which is currently maintained in the Finance Department budget.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology		\$60,000					
Other Expenses							
TOTAL		\$60,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Town Building Switchings	Fiscal Year:	2024

Supplemental Information

Clarification of Questions

- 4. The ITC submitted this request.
- 10. ITC staff will need to be trained on the use of the new equipment.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Town Internet Control, Analysis, and Reporting						Fiscal Year: 2022	
Request Type:	Acquisition	Classification:	Technology	Primary Purpose:	General Government	Status:	Existing Project
Department:	Finance			Useful Life:	More than 5 Years	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		
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?						Not Applicable	
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Not Applicable	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		Currently the Town is using a combination of hardware and software to manage and maintain the basic flow of access to the internet. The request would upgrade firewalls, software, and applications to help ITC better control, analyze, and report on the traffic that currently takes place. There is an increased interest and demand for cyber security across all levels of industry and how to better defend from unwanted attacks and this request would assist the Information Technology Center in maintaining and increasing the level of security from where the Town is currently.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology		\$75,000					
Other Expenses							
TOTAL		\$75,000					

Capital Improvement Plan
January 2020

Capital Project Request

Project Title: Town Internet Control, Analysis, and Reporting

Fiscal Year: 2022

Supplemental Information

Clarification of Questions

4. The ITC submitted this request.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Video Projection Equipment Rosemary Recreation Complex						Fiscal Year: 2024	
Request Type:	Acquisition	Classification:	Technology	Primary Purpose:	Community Services	Status:	Existing-Revised Project
Department:	Finance			Useful Life:	More than 5 Years	Project Cost:	\$55,000
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						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?						Not Applicable	
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Not Applicable	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						No	
18. If funded, will this project increase the operating expense for any other department?						No	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		At the Rosemary Recreation Complex there are Smart TVs and display monitors that were included in the base construction of the building. At the time of the submission (October 2018) of this request the Information Technology Center was looking at a five year replacement cycle for this hardware. The equipment will be into its sixth year of use and the replacement equipment will have more features and better capabilities. The request not only includes the purchase of hardware but also the dollars estimated for installation and training.			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology		\$55,000					
Other Expenses							
TOTAL		\$55,000					

Capital Improvement Plan
January 2020

Capital Project Request

Project Title: Video Projection Equipment Rosemary Recreation Complex

Fiscal Year:

2024

Supplemental Information

Rosemary Recreation Complex rooms where equipment will be replaced

- 1) Multi-purpose Room Projector upgraded
- 2) Health Department Conference Room Smart TV upgraded
- 4) Park and Recreation Conference Room Smart TV upgraded

Clarification of Questions

4. The ITC submitted this request.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Video Projection Equipment Town Hall						Fiscal Year: 2022	
Request Type:	Acquisition	Classification:	Technology	Primary Purpose:	General Government	Status:	Existing Project
Department:	Finance			Useful Life:	More than 5 Years	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		
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?							Not Applicable
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							Not Applicable
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							No
12. Is this a request in response to a Court, Federal, or State order?							No
13. Is this a request in response to a documented public health or safety condition?							No
14. Is this a request to improve or make repairs to extend the useful life of a building?							No
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							No
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No
17. Will any other department be required to provide assistance in order to complete the project?							No
18. If funded, will this project increase the operating expense for any other department?							No
19. If funded, will additional permanent staff be required?							No
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		At the Town Hall there are video projectors and display monitors that were included in the base construction of the building. All of these devices are almost 10 years old and have issues with resolution compatibility and connection capabilities with attached devices. Based on a cost comparison at the time of the original (October 2018) submission of this request all projectors will be replaced with Smart TVs. Display monitors will be replaced with equipment similar in size but with better display capabilities. The request not only includes the purchase of hardware but also the dollars estimated for installation and training. <u>Continued below</u>			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology		\$50,000					
Other Expenses							
TOTAL		\$50,000					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Video Projection Equipment Town Hall	Fiscal Year:	2022

Supplemental Information

Town Hall rooms where equipment will be upgraded or changed.

- 1) Select Board Chambers projector upgraded or replaced with SmartTV
- 1) Select Board Chambers display monitor upgraded
- 2) Great Plain Room projector replaced with SmartTV
- 3) Highland Room projector replaced with SmartTV

Clarification of Questions

4. The ITC submitted this request.

Capital Improvement Plan
January 2020

Capital Project Request								
Project Title:		Wireless Hardware Infrastructure				Fiscal Year:		2024
Request Type:	Acquisition	Classification:	Technology	Primary Purpose:	General Government	Status:	Existing Project	
Department:	Finance			Useful Life:	More than 5 Years	Project Cost:	\$175,000	
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000			
Parameters						Response		
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?							No	
3. Does this project require any permitting by any Town or State agency?							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?							Not Applicable	
6. If this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							Not Applicable	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							Yes	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							No	
12. Is this a request in response to a Court, Federal, or State order?							No	
13. Is this a request in response to a documented public health or safety condition?							No	
14. Is this a request to improve or make repairs to extend the useful life of a building?							No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No	
17. Will any other department be required to provide assistance in order to complete the project?							No	
18. If funded, will this project increase the operating expense for any other department?							No	
19. If funded, will additional permanent staff be required?							No	
Total New FTE's:		0	Project Description and Considerations					
Project Budget Elements		Project Budget		This request is for the replacement and upgrade of the wireless access points (WAPs) installed across multiple buildings. Currently the Town has wireless access available in multiple buildings throughout Town. These buildings include Town Hall, Public Services Administration Building, The Center at The Heights, Publics Safety (NPD/Station 1), the Rosemary Recreation Complex, and soon to include the Memorial Field House. Part of the hardware included with this upgrade is a controller that is designed to manage the WAPs. The inclusion of the wireless infrastructure and hardware was part of the original construction and there was no previous capital request for any replacement or upgrade. Moving into the future the older WAP's will not be compatible with any updated controller software making it necessary to upgrade the WAPs.				
Planning/Feasibility								
Design/Engineering								
Land/ROW Acquisition								
Site Preparation								
Construction								
Construction Management								
Equipment								
Furniture, Fixtures, and Equipment								
Technology		\$175,000						
Other Expenses								
TOTAL		\$175,000						

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Wireless Hardware Infrastructure	Fiscal Year:	2024

Supplemental Information

Clarification of Questions

4. The ITC submitted this request.

10. Annual licensing for the wireless controller and WAPs are currently part of the ITC operating budget. There are currently ITC operating budget dollars used for licensing for the both hardware and software maintenance and support. Those dollars would be used for annual licensing and maintenance of the updated hardware.

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Open Space Acquisition for Municipal Purposes						Fiscal Year: 2021	
Request Type:	Acquisition	Classification:	Land	Primary Purpose:	General Government	Status:	Informational Only
Department:	Town Manager			Useful Life:	More than 30 Years	Project Cost:	\$1,000,000
How was the Project Cost Determined:			Budget Impact:				
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?							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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							Yes
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							No
12. Is this a request in response to a Court, Federal, or State order?							No
13. Is this a request in response to a documented public health or safety condition?							No
14. Is this a request to improve or make repairs to extend the useful life of a building?							No
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							No
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							Yes
17. Will any other department be required to provide assistance in order to complete the project?							Yes
18. If funded, will this project increase the operating expense for any other department?							Yes
19. If funded, will additional permanent staff be required?							No
Total New FTE's:			Project Description and Considerations				
Project Budget Elements		Project Budget		At the time of this submission, a specific parcel/parcels is not known to be available. The requested amount will depend on the number of parcels that may become available for the Town to purchase. The intended usage would be for municipal operations or municipal parking. 3. The Planning Board would need to be involved for the proper permitting. 6. Yes, the Director of the DPW is aware of this future potential. 16 and 17. Depending on the parcel that would be acquired, the land would need to be prepared as needed for its intended use. This could involve multiple divisions within the DPW and legal counsel. 18. This project will increase the budgets of either the Building Maintenance, Highway, or Parks and Forestry			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition		\$1,000,000					
Site Preparation							
Construction							
Construction Management							
Equipment							
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$1,000,000					

Capital Improvement Plan
January 2020

Capital Project Request								
Project Title:		Town Offices Replacement Furniture					Fiscal Year:	2023
Request Type:	Acquisition	Classification:	Equipment	Primary Purpose:	General Government	Status:	Existing Project	
Department:	Town Manager			Useful Life:	More than 5 Years	Project Cost:	\$25,000	
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000			
Parameters						Response		
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?							No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?							No	
3. Does this project require any permitting by any Town or State agency?							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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?							Not Applicable	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?							No	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?							No	
12. Is this a request in response to a Court, Federal, or State order?							No	
13. Is this a request in response to a documented public health or safety condition?							No	
14. Is this a request to improve or make repairs to extend the useful life of a building?							No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							No	
17. Will any other department be required to provide assistance in order to complete the project?							No	
18. If funded, will this project increase the operating expense for any other department?							No	
19. If funded, will additional permanent staff be required?							No	
Total New FTE's:		Project Description and Considerations						
Project Budget Elements		Project Budget		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. 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 2019 pricing: office task chairs \$900 each. 5 drawer regular file cabinets \$1,000 each. 5' conference table \$1,300 each, conference chairs \$1,000 each.				
Planning/Feasibility								
Design/Engineering								
Land/ROW Acquisition								
Site Preparation								
Construction								
Construction Management								
Equipment								
Furniture, Fixtures, and Equipment		\$25,000						
Technology								
Other Expenses								
TOTAL		\$25,000						

Capital Improvement Plan
January 2020

Capital Project Request								
Project Title:		Town Offices Replacement Furniture				Fiscal Year:		2025
Request Type:	Acquisition	Classification:	Equipment	Primary Purpose:	General Government	Status:	Existing Project	
Department:	Town Manager			Useful Life:	More than 5 Years	Project Cost:	\$25,000	
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	Negligible impact on the annual operating expenses less than \$5,000			
Parameters						Response		
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No		
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No		
3. Does this project require any permitting by any Town or State agency?						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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Not Applicable		
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						No		
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						No		
12. Is this a request in response to a Court, Federal, or State order?						No		
13. Is this a request in response to a documented public health or safety condition?						No		
14. Is this a request to improve or make repairs to extend the useful life of a building?						No		
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No		
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No		
17. Will any other department be required to provide assistance in order to complete the project?						No		
18. If funded, will this project increase the operating expense for any other department?						No		
19. If funded, will additional permanent staff be required?						No		
Total New FTE's:		Project Description and Considerations						
Project Budget Elements		Project Budget		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. 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 2019 pricing: office task chairs \$900 each. 5 drawer regular file cabinets \$1,000 each. 5' conference table \$1,300 each, conference chairs \$1,000 each.				
Planning/Feasibility								
Design/Engineering								
Land/ROW Acquisition								
Site Preparation								
Construction								
Construction Management								
Equipment								
Furniture, Fixtures, and Equipment		\$25,000						
Technology								
Other Expenses								
TOTAL		\$25,000						

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Fleet Program FY2021						Fiscal Year: 2021	
Request Type:	Acquisition	Classification:	Equipment	Primary Purpose:	Other (see below for information)	Status:	Existing-Revised Project
Department:	Finance			Useful Life:	More than 5 Years	Project Cost:	\$1,629,819
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	May increase annual operating expenses between \$5,001 and \$25,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						Yes	
4. If 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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Not Applicable	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						Yes	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						Not Applicable	
12. Is this a request in response to a Court, Federal, or State order?						No	
13. Is this a request in response to a documented public health or safety condition?						No	
14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						No	
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						No	
17. Will any other department be required to provide assistance in order to complete the project?						Yes	
18. If funded, will this project increase the operating expense for any other department?						Yes	
19. If funded, will additional permanent staff be required?						No	
Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		The Town's fleet program is funded through both the capital plan and the operating budget. A major equipment expense for the Town is the 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 program consolidates all registered 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,			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment		\$1,629,819					
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$1,629,819					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Fleet Program FY2021	Fiscal Year:	2021

Supplemental Information

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. The Needham Public Schools fleet replacement program is funded through the capital process, but the School Department does from time to time acquire additional vehicles outside of the capital process and Town Meeting votes. Much of the Town's fleet maintenance and management is performed by the Fleet 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 diverse fleet of 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 several 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

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 250 vehicles, trailers, and large specialized attachments and the School Department fleet of vans and buses. General purpose vehicles include pickup trucks, a variety of police vehicles, school buses, sedans, SUV's, and vans (98). They comprise approximately 41 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.

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Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Fleet Program FY2021	Fiscal Year:	2021

Specialized, high value vehicles, and snow and ice equipment comprise of the other 34 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 request for this fiscal year 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 a future fiscal year 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.

Specific Questions:

Question 3: Does this project require any permitting by any Town or State agency? All vehicles which travel the public roadways must be registered through the Massachusetts Department of Motor Vehicles.

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 10: 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 17: 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 18: 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.

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.

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Capital Improvement Plan
January 2020

Capital Project Request					
Project Title: Fleet Program FY2021			Fiscal Year: 2021		
Unit #	Division	Vehicle Year	Current Vehicle	New Vehicle Type	Amount
707	Building Maintenance	2008	Ford Econ Van E250	Utility Van Class 2	\$48,713
820	Building Maintenance	2009	Ford Escape Hybrid	Work Truck Class 1 Vehicle	\$43,002
43	Highway	2012	Ford F350	Work Truck Class 3 Vehicle	\$69,455
23	Sewer	2011	Ford F350	Work Truck Class 3 Vehicle	\$79,805
31	Water	2011	Ford F150	Work Truck Class 2 Pick Up (Upgrade)	\$43,002
C-03	Fire	2013	FORD EXPLORER	Public Safety Response Vehicle	\$55,502
Van 7	School	2012	FORD E250 VAN	Passenger Van with Wheelchair Lift	\$52,374
Van 8	School	2013	FORD E250 VAN	Passenger Van with Wheelchair Lift	\$52,374
Core Fleet					\$444,227
181	Highway	2012	Elgin PELICAN Sweeper	Street Sweeper	\$263,412
34	RSW	2001	MACK TRACTOR	Heavy Duty Truck Class 8 Roll Off	\$168,255
101	Sewer	2010	CASE LOADER	Heavy Duty Tractor	\$238,283
R-04	Fire	2006	FORD E450 AMBULANCE	Ambulance	\$337,479
Specialized Equipment					\$1,007,429
113	Highway	2008	CAMOPLAST SW4S	Sidewalk Plow	\$178,163
Snow and Ice Equipment					\$178,163
Total					\$1,629,819

Truck Classification

Class 1 = Smallest Pick-up Trucks 6,000 lbs.
 Class 2 = Full Size or 1/2 Ton Pick-up Trucks 6K to 10K lbs. (ex Ford F150 and F250)
 Class 3 = Heavy Duty Pick-up Trucks 10K to 14K lbs. (ex Ford F350)
 Class 4 = Medium Size Work Trucks 14K to 16K lbs. (ex Ford F450)
 Class 5 = Medium Job Trucks 16K to 19.5K lbs. (ex Ford F550)
 Class 6 = Medium to Large Trucks 19.5K to 26K (ex Ford F650)
 Class 7 = Heavy Duty Trucks 26K to 33K (ex Ford F750) Requires Class B Commercial
 Class 8 = Largest Heavy Duty Trucks 33K lbs. or more (ex 18-wheeler)

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Fleet Program FY2022		Fiscal Year: 2022					
Request Type:	Acquisition	Classification:	Equipment	Primary Purpose:	Other (see below for information)	Status:	Existing-Revised Project
Department:	Finance	Useful Life:	More than 5 Years	Project Cost:	\$2,436,806		
How was the Project Cost Determined:		In-House Estimate	Budget Impact:	May increase annual operating expenses between \$5,001 and \$25,000			
Parameters				Response			
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?				No			
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?				No			
3. Does this project require any permitting by any Town or State agency?				Yes			
4. If 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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?				Not Applicable			
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?				Yes			
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?				Not Applicable			
12. Is this a request in response to a Court, Federal, or State order?				No			
13. Is this a request in response to a documented public health or safety condition?				No			
14. Is this a request to improve or make repairs to extend the useful life of a building?				No			
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?				No			
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?				No			
17. Will any other department be required to provide assistance in order to complete the project?				Yes			
18. If funded, will this project increase the operating expense for any other department?				Yes			
19. If funded, will additional permanent staff be required?				No			
Total New FTE's:		0	Project Description and Considerations				
Project Budget Elements		Project Budget		The Town's fleet program is funded through both the capital plan and the operating budget. A major equipment expense for the Town is the 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 program consolidates all registered 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			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment		\$2,436,806					
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$2,436,806					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Fleet Program FY2022	Fiscal Year:	2022
<u>Supplemental Information</u>			

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. The Needham Public Schools fleet replacement program is funded through the capital process, but the School Department does from time to time acquire additional vehicles outside of the capital process and Town Meeting votes. Much of the Town's fleet maintenance and management is performed by the Fleet 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.

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- 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 Improvement Plan
January 2020

Capital Project Request			
Project Title:	Fleet Program FY2022	Fiscal Year:	2022

Specialized, high value vehicles, and snow and ice equipment comprise of the other 34 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 request for this fiscal year 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 a future fiscal year 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.

Specific Questions:

Question 3: Does this project require any permitting by any Town or State agency? All vehicles which travel the public roadways must be registered through the Massachusetts Department of Motor Vehicles.

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 10: 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 17: 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 18: 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.

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.

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Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Fleet Program FY2022	Fiscal Year:	2022

Unit #	Division	Vehicle Year	Current Vehicle	New Vehicle Type	Amount
400	Building Inspector	2005	Ford Taurus	SUV Hybrid	\$33,085
454	Building Inspector	2014	Ford Fusion	SUV Hybrid	\$33,085
456	Building Inspector	2014	Ford Fusion	SUV Hybrid	\$33,085
712	Building Maintenance	2011	Ford Econ Van E250	Utility Van Class 2	\$43,709
756	Building Maintenance	2010	Ford F150	SUV Hybrid	\$37,060
45	Engineering	2012	FORD E150 VAN	Passenger Van	\$42,621
C-02	Fire	2016	Chevrolet TAHOE	Public Safety Response Vehicle	\$52,519
404	Health and Human Services	2012	Ford E350 VAN	Large Passenger Van	\$87,354
32	Highway	2012	Ford F350	Work Truck Class 3 Pick Up	\$63,804
Van 10	School	2015	TOYOTA SIENNA	Passenger Van	\$48,002
Van 9	School	2014	TOYOTA SIENNA	Passenger Van	\$48,002
17	Sewer	2012	Ford F550	Work Truck Class 5 Dump	\$68,363
30	Water	2012	Ford F550	Work Truck Class 5 Dump	\$127,715
40	Water	2012	Ford F350	Work Truck Class 4 Utility	\$63,804
Core Fleet					\$782,208

Capital Improvement Plan
January 2020

Capital Project Request					
Project Title:	Fleet Program FY2022			Fiscal Year:	2022
R-03	Fire	2008	FORD E450 AMBULANCE	Ambulance	\$338,476
3	Fleet	2012	Ford F450	Work Truck Class 5 Box	\$73,343
10	Highway	2010	INTERNATIONAL 7400 Series	Heavy Duty Truck Class 8 Large Dump	\$252,027
39	Highway	2012	Ford F550	Work Truck Class 5 Dump	\$68,363
350	Parks	2010	JOHN DEERE TRACTOR LOADER 4720	Tractor	\$62,774
91	RSW	2000	CONSTRUCTION SCALP TRUCK	Material Screener	\$133,625
19	Sewer	2010	INTERNATIONAL 7400 Series	Heavy Duty Truck Class 8 Large Dump	\$250,956
37	Sewer	2010	INTERNATIONAL 7500 Series	Heavy Duty Truck Class 8 Vactor	\$384,570
25	Water	2012	Ford F450	Work Truck Class 5 Utility	\$90,464
Specialized Equipment					\$1,654,598
Total					\$2,436,806

Truck Classification

Class 1 = Smallest Pick-up Trucks 6,000 lbs.

Class 2 = Full Size or 1/2 Ton Pick-up Trucks 6K to 10K lbs. (ex Ford F150 and F250)

Class 3 = Heavy Duty Pick-up Trucks 10K to 14K lbs. (ex Ford F350)

Class 4 = Medium Size Work Trucks 14K to 16K lbs. (ex Ford F450)

Class 5 = Medium Job Trucks 16K to 19.5K lbs. (ex Ford F550)

Class 6 = Medium to Large Trucks 19.5K to 26K (ex Ford F650)

Class 7 = Heavy Duty Trucks 26K to 33K (ex Ford F750) Requires Class B Commercial

Class 8 = Largest Heavy Duty Trucks 33K lbs. or more (ex 18-wheeler)

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Fleet Program FY2023		Fiscal Year: 2023					
Request Type:	Acquisition	Classification:	Equipment	Primary Purpose:	Other (see below for information)	Status:	Existing-Revised Project
Department:	Finance	Useful Life:	More than 5 Years	Project Cost:	\$936,859		
How was the Project Cost Determined:		In-House Estimate	Budget Impact:	May increase annual operating expenses between \$5,001 and \$25,000			
Parameters				Response			
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?				No			
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?				No			
3. Does this project require any permitting by any Town or State agency?				Yes			
4. If 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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?				Not Applicable			
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?				Yes			
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?				Not Applicable			
12. Is this a request in response to a Court, Federal, or State order?				No			
13. Is this a request in response to a documented public health or safety condition?				No			
14. Is this a request to improve or make repairs to extend the useful life of a building?				No			
15. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?				No			
16. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?				No			
17. Will any other department be required to provide assistance in order to complete the project?				Yes			
18. If funded, will this project increase the operating expense for any other department?				Yes			
19. If funded, will additional permanent staff be required?				No			
Total New FTE's:		0	Project Description and Considerations				
Project Budget Elements		Project Budget		The Town's fleet program is funded through both the capital plan and the operating budget. A major equipment expense for the Town is the 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 program consolidates all registered 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			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment		\$936,859					
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$936,859					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Fleet Program FY2023	Fiscal Year:	2023

Supplemental Information

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. The Needham Public Schools fleet replacement program is funded through the capital process, but the School Department does from time to time acquire additional vehicles outside of the capital process and Town Meeting votes. Much of the Town's fleet maintenance and management is performed by the Fleet 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 diverse fleet of 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 several 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

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 250 vehicles, trailers, and large specialized attachments and the School Department fleet of vans and buses. General purpose vehicles include pickup trucks, a variety of police vehicles, school buses, sedans, SUV's, and vans (98). They comprise approximately 41 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.

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Capital Improvement Plan
January 2020

Capital Project Request	
Project Title: Fleet Program FY2023	Fiscal Year: 2023
Specialized, high value vehicles, and snow and ice equipment comprise of the other 34 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 request for this fiscal year 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 a future fiscal year 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. <u>Specific Questions:</u> Question 3: Does this project require any permitting by any Town or State agency? All vehicles which travel the public roadways must be registered through the Massachusetts Department of Motor Vehicles. 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 10: 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 17: 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 18: 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. 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. Continues to Next Page	

Capital Improvement Plan
January 2020

Capital Project Request					
Project Title: Fleet Program FY2023			Fiscal Year: 2023		
Unit #	Division	Vehicle Year	Current Vehicle	New Vehicle Type	Amount
700	Building Maintenance	2012	Ford Econ Van E250	Utility Van Class 2	\$45,239
11	Sewer	2013	FORD EXPLORER	SUV Hybrid	\$38,851
452	Assessing	2013	Ford Taurus	SUV Hybrid	\$35,758
C-06	Fire	2015	Ford F350	Fire Brush Truck	\$68,750
Core Fleet					\$188,598
254	Parks	2013	BANDIT BRUSH CHIPPER	Speciality Trailer	\$68,317
164	Water	2008	Trailer ATLAS Copco	Speciality Trailer	\$34,592
5	RSW	2011	INTERNATIONAL 7400 Series	Heavy Duty Truck Class 8 Packer	\$230,918
Specialized Equipment					\$333,827
108	Highway	2011	TRACKLESS TRACTOR	Sidewalk Plow	\$184,821
112	Highway	2011	Prinoth SW4S	Sidewalk Plow	\$229,613
Snow and Ice Equipment					\$414,434
Total					\$936,859

Truck Classification

Class 1 = Smallest Pick-up Trucks 6,000 lbs.

Class 2 = Full Size or 1/2 Ton Pick-up Trucks 6K to 10K lbs. (ex Ford F150 and F250)

Class 3 = Heavy Duty Pick-up Trucks 10K to 14K lbs. (ex Ford F350)

Class 4 = Medium Size Work Trucks 14K to 16K lbs. (ex Ford F450)

Class 5 = Medium Job Trucks 16K to 19.5K lbs. (ex Ford F550)

Class 6 = Medium to Large Trucks 19.5K to 26K (ex Ford F650)

Class 7 = Heavy Duty Trucks 26K to 33K (ex Ford F750) Requires Class B Commercial

Class 8 = Largest Heavy Duty Trucks 33K lbs. or more (ex 18-wheeler)

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Fleet Program FY2024		Fiscal Year: 2024					
Request Type:	Acquisition	Classification:	Equipment	Primary Purpose:	Other (see below for information)	Status:	Existing-Revised Project
Department:	Finance	Useful Life:	More than 5 Years	Project Cost:	\$2,681,731		
How was the Project Cost Determined:		In-House Estimate	Budget Impact:	May increase annual operating expenses between \$5,001 and \$25,000			
Parameters				Response			
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?				No			
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?				No			
3. Does this project require any permitting by any Town or State agency?				Yes			
4. If 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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?				Not Applicable			
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?				Yes			
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?				Not Applicable			
12. Is this a request in response to a Court, Federal, or State order?				No			
13. Is this a request in response to a documented public health or safety condition?				No			
14. Is this a request to improve or make repairs to extend the useful life of a building?				No			
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Total New FTE's:		0	Project Description and Considerations				
Project Budget Elements		Project Budget		The Town's fleet program is funded through both the capital plan and the operating budget. A major equipment expense for the Town is the 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 program consolidates all registered 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			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment		\$2,681,731					
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$2,681,731					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Fleet Program FY2024	Fiscal Year:	2024
<u>Supplemental Information</u>			

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Capital Improvement Plan
January 2020

Capital Project Request	
Project Title: Fleet Program FY2024	Fiscal Year: 2024
Specialized, high value vehicles, and snow and ice equipment comprise of the other 34 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 request for this fiscal year 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 a future fiscal year 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. <u>Specific Questions:</u> Question 3: Does this project require any permitting by any Town or State agency? All vehicles which travel the public roadways must be registered through the Massachusetts Department of Motor Vehicles. 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 10: 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 17: 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 18: 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. 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. Continues to Next Page	

Capital Improvement Plan
January 2020

Capital Project Request					
Project Title: Fleet Program FY2024			Fiscal Year: 2024		
Unit #	Division	Vehicle Year	Current Vehicle	New Vehicle Type	Amount
453	Building Inspector	2016	Ford Focus	SUV Hybrid	\$35,441
455	Building Inspector	2016	Ford Focus	SUV Hybrid	\$35,441
713	Building Maintenance	2012	Ford F450	Work Truck Class 5 Dump	\$78,567
C-01	Fire	2017	Ford Explorer	Public Safety Response Vehicle	\$49,404
Core Fleet					\$198,853
L-01	Fire	2004	SUTPHEN QUINT LADDER TRUCK	Fire Ladder Truck	\$1,512,026
R-01	Fire	2016	FORD E450 AMBULANCE	Ambulance	\$362,584
9	Highway	2012	INTERNATIONAL 7400 Series	Heavy Duty Truck Class 8 Large Dump	\$268,830
Bus 1	School	2017	BLUE BIRD 303 SCHOOL BUS	School Bus	\$99,835
Bus 2	School	2017	BLUE BIRD 303 SCHOOL BUS	School Bus	\$99,835
103	Sewer	2012	JOHN DEERE BACKHOE	Backhoe	\$139,768
Specialized Equipment					\$2,482,878
Total					\$2,681,731

Truck Classification

Class 1 = Smallest Pick-up Trucks 6,000 lbs.

Class 2 = Full Size or 1/2 Ton Pick-up Trucks 6K to 10K lbs. (ex Ford F150 and F250)

Class 3 = Heavy Duty Pick-up Trucks 10K to 14K lbs. (ex Ford F350)

Class 4 = Medium Size Work Trucks 14K to 16K lbs. (ex Ford F450)

Class 5 = Medium Job Trucks 16K to 19.5K lbs. (ex Ford F550)

Class 6 = Medium to Large Trucks 19.5K to 26K (ex Ford F650)

Class 7 = Heavy Duty Trucks 26K to 33K (ex Ford F750) Requires Class B Commercial

Class 8 = Largest Heavy Duty Trucks 33K lbs. or more (ex 18-wheeler)

Capital Improvement Plan
January 2020

Capital Project Request							
Project Title: Fleet Program FY2025						Fiscal Year: 2025	
Request Type:	Acquisition	Classification:	Equipment	Primary Purpose:	Other (see below for information)	Status:	Existing-Revised Project
Department:	Finance			Useful Life:	More than 5 Years	Project Cost:	\$2,111,556
How was the Project Cost Determined:		In-House Estimate		Budget Impact:	May increase annual operating expenses between \$5,001 and \$25,000		
Parameters						Response	
1. Are there any costs to bid, design, construct, purchase, install, implement, or otherwise complete the project which are NOT included in this request?						No	
2. Are there recommendations or costs identified by other departments which are NOT factored into the request?						No	
3. Does this project require any permitting by any Town or State agency?						Yes	
4. If 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 this request is for a project involving design/construction of public property other than building improvements, has the Department communicated with DPW, and does DPW support the request?						Not Applicable	
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. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset?						Yes	
11. Is this a project for which an Initial Eligibility Project Application can be filed with the Community Preservation Committee (CPC)?						Not Applicable	
12. Is this a request in response to a Court, Federal, or State order?						No	
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14. Is this a request to improve or make repairs to extend the useful life of a building?						No	
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Total New FTE's:		0		Project Description and Considerations			
Project Budget Elements		Project Budget		The Town's fleet program is funded through both the capital plan and the operating budget. A major equipment expense for the Town is the 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 program consolidates all registered 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			
Planning/Feasibility							
Design/Engineering							
Land/ROW Acquisition							
Site Preparation							
Construction							
Construction Management							
Equipment		\$2,111,556					
Furniture, Fixtures, and Equipment							
Technology							
Other Expenses							
TOTAL		\$2,111,556					

Capital Improvement Plan
January 2020

Capital Project Request			
Project Title:	Fleet Program FY2025	Fiscal Year:	2025
<u>Supplemental Information</u>			

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Capital Improvement Plan
January 2020

Capital Project Request	
Project Title: Fleet Program FY2025	Fiscal Year: 2025
Specialized, high value vehicles, and snow and ice equipment comprise of the other 34 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 request for this fiscal year 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 a future fiscal year 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. <u>Specific Questions:</u> Question 3: Does this project require any permitting by any Town or State agency? All vehicles which travel the public roadways must be registered through the Massachusetts Department of Motor Vehicles. 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 10: 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 17: 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 18: 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. 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. Continues to Next Page	

Capital Improvement Plan
January 2020

Capital Project Request					
Project Title: Fleet Program FY2025			Fiscal Year: 2025		
Unit #	Division	Vehicle Year	Current Vehicle	New Vehicle Type	Amount
701	Building Maintenance	2014	Ford F250	Work Truck Class 2 Pick Up	\$44,950
C-43	Fire	2017	FORD ESCAPE	Public Safety Response Vehicle	\$28,638
588	Police	2014	Ford F150	Work Truck Class 2 Pick Up (Upgrade)	\$44,950
Van 11	School	2018	FORD TRANSIT	Passenger Van	\$53,220
Van 12	School	2018	FORD TRANSIT	Passenger Van	\$53,220
Core Fleet					\$224,978
R-02	Fire	2017	FORD E450 AMBULANCE	Ambulance	\$250,538
E-04	Fire	2005	E-ONE CYCLONE II FIRE TRUCK	Fire Engine	\$900,004
66	Highway	2015	Ford F550	Work Truck Class 5 Dump	\$100,793
72	Parks	2015	Ford F550	Work Truck Class 5 Chip Box	\$92,390
53	RSW	2013	INTERNATIONAL Paystar 5600 Rolloff	Heavy Duty Truck Class 8 Rolloff	\$211,556
93	RSW	2015	McCloskey Brothers TROMMEL SCREEN 512R	Trommel Screener	\$138,841
Specialized Equipment					\$1,694,122
111	Highway	2013	TRACKLESS TRACTOR	Sidewalk Plow	\$192,456
Snow and Ice Equipment					\$192,456
Total					\$2,111,556

Truck Classification

Class 1 = Smallest Pick-up Trucks 6,000 lbs.

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