

# Infrastructure Submissions

## Section 7



**Five Year Department Submissions  
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FY2015 - FY2019**

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Department Capital Request CIP-DCR								
Title	Replace Fire Alarm Cables for Add-A-Lane Project	Department	Fire	Fiscal Year	2015			
Parameters						YES	NO	NA
1.	Is this a multi-year capital replacement/upgrade request?					X		
2.	Is this a request in response to a documented public health or safety condition?						X	
3.	Is this a request in response to a Court, Federal, or State order?					X		
4.	Is this a request for a study or long range plan?						X	
5.	Is this a request to purchase office or school equipment (other than technology)?						X	
6.	Is this a request to purchase specialty equipment?						X	
7.	Is this a request to purchase technology or wireless communication system?						X	
8.	Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						X	
9.	Is this a request to improve or make repair to extend the useful life of a public building?						X	
10.	Is this a request to improve or replace public infrastructure: bridges, culverts, drainage, intersection, roads, sidewalks, sewers or water systems?						X	
11.	Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						X	
12.	Will any other department be required to provide resources (other than fulfilling its responsibilities) at any point during the process in order to complete the project?						X	
13.	Are there recommendations or costs identified by other departments that are NOT factored into the request?						X	
14.	Are there additional costs to purchase, install, implement, and/or use (except future year operating costs) that are NOT included in this request?						X	
15.	Are there additional costs to bid, design, construct, complete, and/or use (except future year operating costs) that are NOT included in this request?						X	
16.	If approved, will this request increase the operating expense for any other department?						X	
17.	If approved, will this request require the need for ongoing assistance from vendors at an additional expense to the Town which is not already budgeted?						X	
18.	If approved, will additional permanent staff be required?						X	
19.	If approved, is the current operating budget sufficient to cover the operating costs of the requested project?						X	
20.	If approved, will this request lower the requesting department's operating costs?						X	
21.	Does the request support activities to produce <b>new</b> revenue for the Town?						X	
22.	If the request is not funded will <b>existing</b> Town revenue sources be negatively impacted?					X		
23.	Have other non-capital investment options been explored before submitting this request?					X		
24.	Is specialized training or annual licensing required that the Town will need to pay in order to use the asset (beyond the initial purchase/installation)?						X	
25.	If applicable, will the items being replaced be retained by the Town?							X
26.	Does this request qualify for funding from Community Preservation Act (CPA)?						X	
27.	Are there any appendix forms with this funding request?						X	

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Department Capital Request CIP-DCR										
Title	Replace Fire Alarm Cables for Add-A-Lane Project				Department	Fire			Fiscal Year	2015
Useful Life	V		Primary Reason		1		Operating Budget Impact			C
Requested Funding Years & Amounts	Column A		Costs Components	Column B		*Other Expenses		Column C		
Year 1	\$60,000.		Intangibles			Enter description				
Year 2			Equipment			Enter description				
Year 3			Design & Engineering			Enter description				
Year 4			Construction Expenses			Enter description				
Year 5			Other Expenses*			Enter description				
Column A Total	\$60,000.		Column B Total				Colum C Total		\$60,000.	
<b>Description and Justification</b>										
<p>This request is to fund replacing all the municipal fire alarm cables which cross Route 128 (I-95) during the construction of the "Add-A-Lane" project as it progresses through Needham.</p> <p>*NOTE* Any and all costs expended by the Town of Needham will be reimbursed by the Commonwealth of Massachusetts through a Force Account.</p> <p>However, it is the responsibility of the utilities (in this case the Needham Fire Department) to complete the required work and submit documentation to receive reimbursement. Meaning, that we will need to go out to bid for the work, contract for it and pay for the work in phases as it progresses. The cables being replaced are part of the municipal fire alarm system which provides service to all of the neighborhoods (both residential and commercial), and many of the buildings on the east side of Route 128.</p> <p>All of the cables which need to be replaced are either on the Kendrick St. bridge or the Highland Ave. bridge. The requested funding would cover the costs of the cable replacement at both locations. However, it may not occur at the same time due to the construction schedule, and therefore a portion of the funds expended may be reimbursed before another section of cables is replaced.</p> <p>Either way, all of the money spent from this funding request will be reimbursed.</p> <p>Lastly, the State has not finalized the construction schedule for this highway expansion project which is why we have requested the funds for an entire five fiscal years. Even when the schedule is finalized, the project will likely span at least two fiscal years.</p>										
FY2015-FY2018 Version										

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Department Capital Request CIP-DCR									
Title	Cooks Bridge – Repair/Replacement	Department	Public Works	Fiscal Year	2015				
Parameters						YES	NO	NA	
1.	Is this a multi-year capital replacement/upgrade request?							X	
2.	Is this a request in response to a documented public health or safety condition?						X		
3.	Is this a request in response to a Court, Federal, or State order?							X	
4.	Is this a request for a study or long range plan?							X	
5.	Is this a request to purchase office or school equipment (other than technology)?							X	
6.	Is this a request to purchase specialty equipment?							X	
7.	Is this a request to purchase technology or wireless communication system?							X	
8.	Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							X	
9.	Is this a request to improve or make repair to extend the useful life of a public building?							X	
10.	Is this a request to improve or replace public infrastructure: bridges, culverts, drainage, intersection, roads, sidewalks, sewers or water systems?						X		
11.	Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							X	
12.	Will any other department be required to provide resources (other than fulfilling its responsibilities) at any point during the process in order to complete the project?							X	
13.	Are there recommendations or costs identified by other departments that are NOT factored into the request?							X	
14.	Are there additional costs to purchase, install, implement, and/or use (except future year operating costs) that are NOT included in this request?							X	
15.	Are there additional costs to bid, design, construct, complete, and/or use (except future year operating costs) that are NOT included in this request?							X	
16.	If approved, will this request increase the operating expense for any other department?							X	
17.	If approved, will this request require the need for ongoing assistance from vendors at an additional expense to the Town which is not already budgeted?							X	
18.	If approved, will additional permanent staff be required?							X	
19.	If approved, is the current operating budget sufficient to cover the operating costs of the requested project?						X		
20.	If approved, will this request lower the requesting department's operating costs?							X	
21.	Does the request support activities to produce <b>new</b> revenue for the Town?							X	
22.	If the request is not funded will <b>existing</b> Town revenue sources be negatively impacted?							X	
23.	Have other non-capital investment options been explored before submitting this request?						X		
24.	Is specialized training or annual licensing required that the Town will need to pay in order to use the asset (beyond the initial purchase/installation)?							X	
25.	If applicable, will the items being replaced be retained by the Town?								X
26.	Does this request qualify for funding from Community Preservation Act (CPA)?						X		
27.	Are there any appendix forms with this funding request?							X	
Useful Life	V	Primary Reason	1	Operating Budget Impact	C				

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Department Capital Request CIP-DCR							
Title	Cooks Bridge – Repair/Replacement		Department	Public Works		Fiscal Year	2015
Requested Funding Years & Amounts	Column A	Costs Components	Column B	*Other Expenses	Column C		
Year 1	900,000	Intangibles		Enter description			
Year 2	6,000,000	Equipment		Enter description			
Year 3		Design & Engineering	900,000	Enter description			
Year 4		Construction Expenses	6,000,000	Enter description			
Year 5		Other Expenses*		Enter description			
Column A Total	6,900,000	Column B Total	6,900,000	Column C Total			
Equipment Schedule		Yes	No	NA	X		
Description and Justification							
<p>Cooks (Eliot) Bridge – Central Ave to Newton Upper Falls</p> <p>In the spring of 2013 this bridge was identified by the state as having structural deficiencies. Upon receiving this information, the Town of Needham and the City of Newton engaged a structural engineer to further evaluate the bridge. A report by the structural engineer was completed in the late summer of 2013 has indicated that further monitoring is necessary to determine what action needs to be taken with this bridge. The Town of Needham is in the process of engaging a consultant to monitor the bridge for a period of six months to determine the extent of the structural deficiencies.</p> <p>It is possible that if the result of that monitoring indicates that the bridge is in need of major repair or replacement that the Town will need to perform engineering and design services in the Summer of 2014, with construction to follow, in order to ensure the safety of this bridge. The budgetary figure indicated for design and engineering is based on the most costly option for repair/replacement, should both communities choose to take that option. The budgetary figures are also for the total cost of design/engineering and construction. The Town fully believes that these costs will be shared with the City of Newton.</p>							
FY2015-FY2018 Version							

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Department Capital Request CIP-DCR								
Title	Sidewalk Needs Assessment	Department	Public Works	Fiscal Year	2016			
Parameters						YES	NO	NA
1.	Is this a multi-year capital replacement/upgrade request?					X		
2.	Is this a request in response to a documented public health or safety condition?						X	
3.	Is this a request in response to a Court, Federal, or State order?						X	
4.	Is this a request for a study or long range plan?					X		
5.	Is this a request to purchase office or school equipment (other than technology)?						X	
6.	Is this a request to purchase specialty equipment?						X	
7.	Is this a request to purchase technology or wireless communication system?						X	
8.	Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						X	
9.	Is this a request to improve or make repair to extend the useful life of a public building?						X	
10.	Is this a request to improve or replace public infrastructure: bridges, culverts, drainage, intersection, roads, sidewalks, sewers or water systems?					X		
11.	Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						X	
12.	Will any other department be required to provide resources (other than fulfilling its responsibilities) at any point during the process in order to complete the project?						X	
13.	Are there recommendations or costs identified by other departments that are NOT factored into the request?						X	
14.	Are there additional costs to purchase, install, implement, and/or use (except future year operating costs) that are NOT included in this request?						X	
15.	Are there additional costs to bid, design, construct, complete, and/or use (except future year operating costs) that are NOT included in this request?						X	
16.	If approved, will this request increase the operating expense for any other department?						X	
17.	If approved, will this request require the need for ongoing assistance from vendors at an additional expense to the Town which is not already budgeted?						X	
18.	If approved, will additional permanent staff be required?						X	
19.	If approved, is the current operating budget sufficient to cover the operating costs of the requested project?						X	
20.	If approved, will this request lower the requesting department's operating costs?						X	
21.	Does the request support activities to produce <b>new</b> revenue for the Town?						X	
22.	If the request is not funded will <b>existing</b> Town revenue sources be negatively impacted?						X	
23.	Have other non-capital investment options been explored before submitting this request?						X	
24.	Is specialized training or annual licensing required that the Town will need to pay in order to use the asset (beyond the initial purchase/installation)?						X	
25.	If applicable, will the items being replaced be retained by the Town?							X
26.	Does this request qualify for funding from Community Preservation Act (CPA)?							X
27.	Are there any appendix forms with this funding request?							X

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Department Capital Request CIP-DCR										
Title	Sidewalk Needs Assessment				Department	Public Works			Fiscal Year	2016
Useful Life	III		Primary Reason	7		Operating Budget Impact	C			
Requested Funding Years & Amounts	Column A	Costs Components	Column B	*Other Expenses	Column C					
Year 1	50,000	Intangibles		Enter description						
Year 2		Equipment		Enter description						
Year 3		Design & Engineering	50,000	Enter description						
Year 4		Construction Expenses		Enter description						
Year 5		Other Expenses*		Enter description						
Column A Total	\$50,000	Column B Total	\$50,000	Column C Total						
Equipment Schedule										
		Yes		No		NA		X		
Description and Justification										
<p>The Traffic Management Advisory Committee (TMAC) has received a number of requests to consider improving pedestrian safety conditions and school walking routes in remote areas of Town. Additionally, the Department of Public Works intends to perform a sidewalk analysis to determine locations where additional sidewalks may be required, and other areas that may be over served by an excess of sidewalks that require maintenance. The Department's goal is to maintain the same or reduce the linear footage of sidewalk throughout the Town.</p> <p>In 2016, this submission is proposing an analysis of the sidewalks within the Town to determine the best course of action in terms of adding or removing sidewalks.</p> <p>Sidewalks that have been identified for consideration for improvements include but are not limited to:</p> <ul style="list-style-type: none"> <li>• Forest St</li> <li>• Nehoiden St</li> <li>• Marked Tree Road</li> <li>• Warren St</li> <li>• High Rock St</li> <li>• Dedham Ave</li> <li>• Central Ave</li> </ul> <p>Once the study has been completed a submission for sidewalk construction and estimates will be made</p>										
FY2015-FY2018 Version										

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Department Capital Request CIP-DCR										
Title	Public Works Infrastructure Program			Department	Public Works			Fiscal Year	2015	
Parameters								YES	NO	NA
1.	Is this a multi-year capital replacement/upgrade request?							X		
2.	Is this a request in response to a documented public health or safety condition?								X	
3.	Is this a request in response to a Court, Federal, or State order?								X	
4.	Is this a request for a study or long range plan?								X	
5.	Is this a request to purchase office or school equipment (other than technology)?								X	
6.	Is this a request to purchase specialty equipment?								X	
7.	Is this a request to purchase technology or wireless communication system?								X	
8.	Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?								X	
9.	Is this a request to improve or make repair to extend the useful life of a public building?								X	
10.	Is this a request to improve or replace public infrastructure: bridges, culverts, drainage, intersection, roads, sidewalks, sewers or water systems?							X		
11.	Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							X		
12.	Will any other department be required to provide resources (other than fulfilling its responsibilities) at any point during the process in order to complete the project?								X	
13.	Are there recommendations or costs indentified by other departments that are NOT factored into the request?								X	
14.	Are there additional costs to purchase, install, implement, and/or use (except future year operating costs) that are NOT included in this request?								X	
15.	Are there additional costs to bid, design, construct, complete, and/or use (except future year operating costs) that are NOT included in this request?								X	
16.	If approved, will this request increase the operating expense for any other department?								X	
17.	If approved, will this request require the need for ongoing assistance from vendors at an additional expense to the Town which is not already budgeted?								X	
18.	If approved, will additional permanent staff be required?								X	
19.	If approved, is the current operating budget sufficient to cover the operating costs of the requested project?							X		
20.	If approved, will this request lower the requesting department's operating costs?								X	
21.	Does the request support activities to produce <b>new</b> revenue for the Town?								X	
22.	If the request is not funded will <b>existing</b> Town revenue sources be negatively impacted?								X	
23.	Have other non-capital investment options been explored before submitting this request?								X	
24.	Is specialized training or annual licensing required that the Town will need to pay in order to use the asset (beyond the initial purchase/installation)?								X	
25.	If applicable, will the items being replaced be retained by the Town?								X	
26.	Does this request qualify for funding from Community Preservation Act (CPA)?								X	
27.	Are there any appendix forms with this funding request?								X	
Useful Life	III			Primary Reason	5			Operating Budget Impact	C	

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Department Capital Request CIP-DCR						
Title	Public Works Infrastructure Program	Department	Public Works	Fiscal Year	2015	
Requested Funding Years & Amounts	Column A	Costs Components	Column B	*Other Expenses	Column C	
Year 1	600,000	Intangibles		Enter description		
Year 2	1,250,000	Equipment		Enter description		
Year 3	1,400,000	Design & Engineering	254,000	Enter description		
Year 4	1,500,000	Construction Expenses	6,096,000	Enter description		
Year 5	1,600,000	Other Expenses*		Enter description		
Column A Total	<b>\$6,350,000</b>	Column B Total	<b>\$6,350,000</b>	Column C Total		
Equipment Schedule						
	Yes	No	NA	X		
Description and Justification						
<p>The Public Works Infrastructure Program allows the Department of Public Works to make improvements and repairs to Town infrastructure, including but not limited to roads, bridges, sidewalks, intersections, drains, brooks and culverts. Each program is detailed below.</p> <p><b>Street Resurfacing:</b> This program is essential to improve the structural and surface integrity of the Town's 123 linear miles of accepted streets. 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.</p> <p>Applying this repair strategy in a timely manner will extend the useful life of the roadway for up to 15 years. Installing a monolithic asphalt berm curb usually placed with the paving operation better defines the edge of road, improves drainage and protects the shoulder from erosion.</p> <p>FY15 - \$400,000 FY16 - \$473,500 FY17 - \$400,000 FY18 - \$600,000 FY19 - \$700,000</p> <p>The average useful life for asphalt paving is 15 years; the proposed 5 year capital request is \$2,573,500.</p> <p>Roads to be considered, but not yet prioritized:</p>						

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Department Capital Request CIP-DCR					
Title	Public Works Infrastructure Program	Department	Public Works	Fiscal Year	2015
<p><b>Traffic Signal &amp; Intersection Improvements:</b>            The costs are estimated by Engineering and require conceptual scope of work for project level costs that have not yet been determined. This program will fund Traffic Signal Improvements &amp; Intersection Improvements and new traffic signal installations where none currently exist.</p> <p>FY15 - No Funding Requested - Project deferred to FY16            FY16 - Highland Avenue @ West Street, Engineering &amp; Design - \$119,000            FY17 - Highland Avenue @ West Street, Construction - \$471,000            FY18 - Great Plain Avenue @ Greendale Avenue, this intersection has been identified as requiring intersection improvements and potentially the replacement of traffic signals, Engineering &amp; Design - \$102,500            FY19 - Great Plain Avenue @ Greendale Avenue, Construction - \$600,000</p> <p>The average useful life is 25 years; the proposed 5 year capital request is \$1,292,500</p> <p>Future Years - Dedham Ave</p> <p><b>Combined Sidewalk Program:</b>            This Program requires funding for the Town to address the failing network of sidewalks throughout the community. There are over 160 miles of accepted sidewalks in Needham. Over half of the Town's sidewalks do not comply with current standards and require significant improvements including the installation of handicapped ramps. Sidewalk improvements must comply with Federal and State laws and construction standards. The cost for sidewalk rehabilitation and reconstruction can vary significantly. Current estimates have identified over \$20,000,000 in backlogged sidewalks in need of repair.</p> <p>Calendar year 2014 contract pricing to reconstruct one mile of asphalt sidewalk with incidental costs is estimated to be \$195,000 per mile (\$36.93/lf). Contract pricing to install a mile of granite curb with minor drainage improvements and incidental costs is estimated to be \$240,000 per mile (\$45.45/lf). These costs do not include engineering, design, tree removal and replacement, major drainage improvements or major public or private property adjustments.</p> <p>FY15 - \$200,000            FY16 - \$525,000            FY17 - \$429,000            FY18 - \$517,500            FY19 - \$300,000</p> <p>The average useful life for asphalt sidewalk is over 30 years; the proposed 5 year capital request is \$2,021,500.</p> <p><b>Storm Drain Capacity Improvements:</b></p>					

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Department Capital Request CIP-DCR					
Title	<b>Public Works Infrastructure Program</b>	Department	<b>Public Works</b>	Fiscal Year	<b>2015</b>
<p>This program provides funding to improve roadway drainage capacity. The March 2002 Stormwater Master Plan identified a number of areas throughout Needham where improvements are required to resolve flooding problems and illicit discharge. Locations for improvements have been prioritized within the plan. This funding request also includes but is not limited to the installation of additional storm drains and the replacement and extension of drains on Manning Street, Hoover Road, Concord Road and Burnside Road with larger capacity drains. Since the issuance of this report numerous multi-unit developments have been built or planned in the Town of Needham. 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.</p> <p>FY15 – No Funding Requested - Project deferred to FY16  FY16 – Taylor Street / Central Avenue – Engineering \$32,500  FY17 - No Funding requested  FY18 – Taylor Street / Central Avenue – Construction \$180,000  FY19 – No Funding requested</p> <p>The average useful life is 60 years; the proposed 5 year capital request is \$212,500.</p> <p>Future Areas to be considered, but not yet prioritized:  Carey Road (area 2) – Engineering \$42,800  Carey Road (area 2) – Construction \$156,800  Foxhill Rd., Canterbury Lane, South St., and X-Country (Area 10) – Eng. 41,800  Lower Hunnewell Drainage improvements Eng. &amp; Construction 305,000  Foxhill Rd., Canterbury Lane, South St., and X-Country (Area 10) – Construction  Concord St., Greendale Ave., Woodbine Cir. System (Area 4) – Eng. 100,000  Oak St. (Area 8), Mackintosh Ave. (Areas 3 &amp; 7), Oxbow Rd. (Area 9), West St. (Area 11)  Fairfield St., Elmwood Rd. (Area 5)</p> <p><b>Brooks and Culverts – Repair and Maintenance:</b></p> <p>The severe storms of October 1996, June 1998, June 2006, July 2008 and March 2010 have resulted in numerous complaints and subsequent investigations of the Town's brooks, streams and culverts. The conditions observed were significant. It is the intention of the DPW to expend Capital Funds to address the issue of poorly draining brooks, streams, waterways and culverts throughout the Town that have been severely damaged by heavy rains/storms in the past. Flooding in March 2010 caused the failure of retaining walls, resulting in extensive erosion and silt deposits in brooks and streams. The Silt has provided a medium for vegetation and affected the flow of water, and the situation has resulted in the loss of useable abutting property and flooded basements. The current conditions are beyond the means of DPW equipment and personnel. It will require a detailed investigation, a plan of recommended improvements, a design drawing and specifications, environmental permitting and</p>					

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Department Capital Request CIP-DCR					
Title	<b>Public Works Infrastructure Program</b>	Department	<b>Public Works</b>	Fiscal Year	<b>2015</b>
<p>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.</p> <p>Environmental Protection Agency (EPA) is currently finalizing stronger requirements for stormwater and permitting under the NPDES permit. The Town will need to continue to demonstrate its efforts regarding cleaning and improvements to water quality of brook and culverts to avoid fines from the EPA.</p> <p>FY15 - No Funding requested.  FY16 - Continued wall repair along Rosemary Brook – Construction \$100,000.  FY17 – Wall repairs at various locations to be determined – Construction \$100,000.  FY18 – Culvert at Meadowbrook Rd – Construction \$100,000  FY 19 – No Funding Requested</p> <p>The proposed 5 year capital request is \$300,000</p> <p>Future Projects include, but are not limited to, the following locations:  Winding River  Locust Lane  Fuller Brook  Oxbow Road  Webster &amp; Howland Streets  Brookside Road &amp; Forest Street  Chestnut Street &amp; Carriage Lane  Emerson Place  Pennsylvania Avenue  Elder Road  Meredith Circle</p> <p>Prior projects funded include:</p> <p>Cleaning of Hurd Brook and culverts, from Central Avenue to the Wellesley line and a portion of Alder Brook.  FY09 - Brook cleaning from Chestnut Street to Maple Street was completed  FY11 - MBTA culvert replacement  FY12 – Rosemary Brook at Mallard Road, Perry Gorge  FY13 – Portion of Rosemary Brook</p>					
FY2015-FY2018 Version					

Town of Needham  
Capital Improvement Plan  
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Department Capital Request CIP-DCR								
Title	Trail Improvement Project: Newman Eastman Conservation		Department	Conservation/Park & Recreation		Fiscal Year	2016	
Parameters						YES	NO	NA
1.	Is this a multi-year capital replacement/upgrade request?						X	
2.	Is this a request in response to a documented public health or safety condition?						X	
3.	Is this a request in response to a Court, Federal, or State order?						X	
4.	Is this a request for a study or long range plan?						X	
5.	Is this a request to purchase office or school equipment (other than technology)?						X	
6.	Is this a request to purchase specialty equipment?						X	
7.	Is this a request to purchase technology or wireless communication system?						X	
8.	Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						X	
9.	Is this a request to improve or make repair to extend the useful life of a public building?						X	
10.	Is this a request to improve or replace public infrastructure: bridges, culverts, drainage, intersection, roads, sidewalks, sewers or water systems?						X	
11.	Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?					X		
12.	Will any other department be required to provide resources (other than fulfilling its responsibilities) at any point during the process in order to complete the project?						X	
13.	Are there recommendations or costs identified by other departments that are NOT factored into the request?						X	
14.	Are there additional costs to purchase, install, implement, and/or use (except future year operating costs) that are NOT included in this request?						X	
15.	Are there additional costs to bid, design, construct, complete, and/or use (except future year operating costs) that are NOT included in this request?						X	
16.	If approved, will this request increase the operating expense for any other department?						X	
17.	If approved, will this request require the need for ongoing assistance from vendors at an additional expense to the Town which is not already budgeted?						X	
18.	If approved, will additional permanent staff be required?						X	
19.	If approved, is the current operating budget sufficient to cover the operating costs of the requested project?					X		
20.	If approved, will this request lower the requesting department's operating costs?						X	
21.	Does the request support activities to produce new revenue for the Town?						X	
22.	If the request is not funded will existing Town revenue sources be negatively impacted?						X	
23.	Have other non-capital investment options been explored before submitting this request?					X		
24.	Is specialized training or annual licensing required that the Town will need to pay in order to use the asset (beyond the initial purchase/installation)?						X	
25.	If applicable, will the items being replaced be retained by the Town?							X
26.	Does this request qualify for funding from Community Preservation Act (CPA)?					X		
27.	Are there any appendix forms with this funding request?						X	
Useful Life	II	Primary Reason	1	Operating Budget Impact			C	

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Department Capital Request CIP-DCR													
Title	Trail Improvement Project: Newman Eastman Conservation		Department	Conservation/Park & Recreation		Fiscal Year	2016						
Requested Funding Years & Amounts	Column A	Costs Components	Column B	*Other Expenses	Column C								
Year 1		Intangibles		Enter description									
Year 2	\$220,500	Equipment		Enter description									
Year 3		Design & Engineering		Enter description									
Year 4		Construction Expenses	\$220,500	Enter description									
Year 5		Other Expenses*		Enter description									
Column A Total	\$220,500	Column B Total	\$220,500	Column C Total									
Equipment Schedule													
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;"></td> <td style="width: 10%; text-align: center;">Yes</td> <td style="width: 10%;"></td> <td style="width: 10%; text-align: center;">No</td> <td style="width: 10%;"></td> <td style="width: 10%; text-align: center;">NA</td> <td style="width: 10%; text-align: center;">X</td> </tr> </table>								Yes		No		NA	X
	Yes		No		NA	X							
Description and Justification													
<p>Design funds were already approved for this project, in conjunction with the design of the Newman athletic fields. As the design is not complete, this request is based on an estimate updated in September 2012 by the Trails Master Plan consultant, with a 5% increased added.</p> <p>The trail system in the Eastman Conservation land behind the Newman School is utilized as part of the curriculum of the Needham Public Schools and its Science Center. It is also hoped that this project will allow the new trails at the Carol/Brewster property to be connected. The Carol/Brewster property has been set up with educational components that would be a great addition to the Science Center's curriculum.</p> <p>The estimate was reviewed in September 2012 by the Trails Master Plan consultant. Design and permitting estimates also include assistance from a structural engineer for bridges and walkways within the wetland areas. With the recent purchase of the Carol/Brewster properties, the trail built on those properties will now be able to be officially connected with those in the Eastman Conservation area.</p>													
FY2015-FY2018 Version													

Town of Needham  
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Department Capital Request CIP-DCR							
Title	Trail Improvement Project: Reservoir Trail and Ridge Hill Loop	Department	Conservation/Park & Recreation	Fiscal Year	2016		
Parameters					YES	NO	NA
1. Is this a multi-year capital replacement/upgrade request?						X	
2. Is this a request in response to a documented public health or safety condition?						X	
3. Is this a request in response to a Court, Federal, or State order?						X	
4. Is this a request for a study or long range plan?						X	
5. Is this a request to purchase office or school equipment (other than technology)?						X	
6. Is this a request to purchase specialty equipment?						X	
7. Is this a request to purchase technology or wireless communication system?						X	
8. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						X	
9. Is this a request to improve or make repair to extend the useful life of a public building?						X	
10. Is this a request to improve or replace public infrastructure: bridges, culverts, drainage, intersection, roads, sidewalks, sewers or water systems?						X	
11. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?					X		
12. Will any other department be required to provide resources (other than fulfilling its responsibilities) at any point during the process in order to complete the project?						X	
13. Are there recommendations or costs identified by other departments that are NOT factored into the request?						X	
14. Are there additional costs to purchase, install, implement, and/or use (except future year operating costs) that are NOT included in this request?						X	
15. Are there additional costs to bid, design, construct, complete, and/or use (except future year operating costs) that are NOT included in this request?						X	
16. If approved, will this request increase the operating expense for any other department?						X	
17. If approved, will this request require the need for ongoing assistance from vendors at an additional expense to the Town which is not already budgeted?						X	
18. If approved, will additional permanent staff be required?						X	
19. If approved, is the current operating budget sufficient to cover the operating costs of the requested project?						X	
20. If approved, will this request lower the requesting department's operating costs?						X	
21. Does the request support activities to produce new revenue for the Town?						X	
22. If the request is not funded will existing Town revenue sources be negatively impacted?						X	
23. Have other non-capital investment options been explored before submitting this request?					X		
24. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset (beyond the initial purchase/installation)?						X	
25. If applicable, will the items being replaced be retained by the Town?							X
26. Does this request qualify for funding from Community Preservation Act (CPA)?					X		
27. Are there any appendix forms with this funding request?						X	
Useful Life	V	Primary Reason	1	Operating Budget Impact		C	

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Department Capital Request CIP-DCR							
Title	Trail Improvement Project: Reservoir Trail and Ridge Hill Loop		Department	Conservation/Park & Recreation		Fiscal Year	2016
Requested Funding Years & Amounts	Column A	Costs Components	Column B		*Other Expenses	Column C	
Year 1	\$160,000	Intangibles			Enter description		
Year 2		Equipment			Enter description		
Year 3		Design & Engineering			Enter description		
Year 4		Construction Expenses		\$160,000	Enter description		
Year 5		Other Expenses*			Enter description		
Column A Total	\$160,000	Column B Total		\$160,000	Column C Total		
Equipment Schedule		Yes	<input type="checkbox"/>	No	<input type="checkbox"/>	NA	<input checked="" type="checkbox"/>
Description and Justification							
<p>Funding was received in FY'14 for the design of this project, through CPA funds. As this is written, the design is not complete, so the construction estimate is still based on the updated estimate from the Trails Master Plan consultant. It will be important to schedule construction in relation to other projects that may be done at the site in upcoming years.</p> <p><b>Reservoir Trail Construction</b> This request is for the construction of a handicap accessible perimeter trail (with boardwalks) around the Needham Reservoir. The development of an accessible trail around one of the Town's important amenities – the Needham Reservoir – was a key priority identified in the Town's Trail Master Plan. The proposal dovetails nicely with the construction of the Public Services Administration Building and the associated improvements to the parcel on Dedham Avenue. Furthermore, as Needham does not currently have a handicapped accessible trail, this project would also provide a unique recreational opportunity for those with mobility problems. In addition, a fishing dock that is accessible would be installed.</p> <p>The estimated cost has been reviewed in September 2012 by the consultants who provided the original estimate in the Trails Master Plan, and the fishing dock estimate was added into the trail project. The estimated construction costs are also preliminary and presume that the project would be executed by a private contractor.</p> <p>In 1890, the Town of Needham acquired the property including and surrounding the Needham Reservoir for water supply purposes. Groundwater extraction wells operated on the property until the 1940's and the reservoir was decommissioned as a water supply source in 1995. The property is under the jurisdiction of the Board of Selectmen and the water supply use has not changed since the property was purchased. What has changed is that pedestrian use of the property – primarily by nearby residents and by employees from the abutting Department of Public Works – has increased. While an ad hoc, dirt road (constructed decades ago to provide access to the</p>							

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Department Capital Request CIP-DCR					
Title	<b>Trail Improvement Project: Reservoir Trail and Ridge Hill Loop</b>	Department	<b>Conservation/Park &amp; Recreation</b>	Fiscal Year	<b>2016</b>
<p>wells) exists along the northern edge of the reservoir, the road is eroding in places and is impassible during wet conditions in others. The remainder of the reservoir perimeter (beyond the last well) is used less frequently; however, those who do walk the southerly portion of the property have blazed their own, inconsistent routes through and over existing shrubs and herbaceous plants in an effort to keep their feet dry. Additionally, some direct abutters to the property have constructed their own "paths" directly to the water's edge.</p> <p>One reason to construct a formal trail system at this location is to preserve the sensitive wetland system that surrounds the reservoir. In order to protect the functions and values of this area (including but not limited to wildlife habitat, storm damage prevention, and pollution prevention) it is necessary to keep pedestrians – who cannot reasonably be excluded from using this property – to a predefined and appropriate space. Creating a functional, dry and obvious trail around the reservoir will address the haphazard and detrimental routes that are developing and will discourage encroachment into the vegetated portions of the property. Furthermore, replacing the outdated access drive with a solid, non-erodible surface will decrease the potential sediment loads to both the surrounding wetlands and the reservoir.</p> <p><b>Ridge Hill Loop Construction</b> This project would create a large turn-around for the northernmost extension of the Esker Trail and connect two branching trails, while insuring that visitors to Ridge Hill do not enter onto adjacent private property. Almost all of the work will be done by volunteers, but a small contingency has been placed in this request in the event that a contractor is needed to provide some assistance in order to complete the trail section.</p>					
FY2015-FY2018 Version					

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Department Capital Request CIP-DCR								
Title	Trail Improvement Project: Rosemary Camp Property		Department	Park and Recreation	Fiscal Year	2018		
Parameters						YES	NO	NA
1.	Is this a multi-year capital replacement/upgrade request?					X		
2.	Is this a request in response to a documented public health or safety condition?						X	
3.	Is this a request in response to a Court, Federal, or State order?						X	
4.	Is this a request for a study or long range plan?						X	
5.	Is this a request to purchase office or school equipment (other than technology)?						X	
6.	Is this a request to purchase specialty equipment?						X	
7.	Is this a request to purchase technology or wireless communication system?						X	
8.	Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						X	
9.	Is this a request to improve or make repair to extend the useful life of a public building?						X	
10.	Is this a request to improve or replace public infrastructure: bridges, culverts, drainage, intersection, roads, sidewalks, sewers or water systems?						X	
11.	Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?					X		
12.	Will any other department be required to provide resources (other than fulfilling its responsibilities) at any point during the process in order to complete the project?						X	
13.	Are there recommendations or costs identified by other departments that are NOT factored into the request?						X	
14.	Are there additional costs to purchase, install, implement, and/or use (except future year operating costs) that are NOT included in this request?						X	
15.	Are there additional costs to bid, design, construct, complete, and/or use (except future year operating costs) that are NOT included in this request?						X	
16.	If approved, will this request increase the operating expense for any other department?						X	
17.	If approved, will this request require the need for ongoing assistance from vendors at an additional expense to the Town which is not already budgeted?						X	
18.	If approved, will additional permanent staff be required?						X	
19.	If approved, is the current operating budget sufficient to cover the operating costs of the requested project?					X		
20.	If approved, will this request lower the requesting department's operating costs?						X	
21.	Does the request support activities to produce <b>new</b> revenue for the Town?						X	
22.	If the request is not funded will <b>existing</b> Town revenue sources be negatively impacted?						X	
23.	Have other non-capital investment options been explored before submitting this request?					X		
24.	Is specialized training or annual licensing required that the Town will need to pay in order to use the asset (beyond the initial purchase/installation)?						X	
25.	If applicable, will the items being replaced be retained by the Town?							X
26.	Does this request qualify for funding from Community Preservation Act (CPA)?					X		
27.	Are there any appendix forms with this funding request?						X	
Useful Life	III	Primary Reason	1	Operating Budget Impact	C			

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Department Capital Request CIP-DCR						
Title	Trail Improvement Project: Rosemary Camp Property			Department	Park and Recreation	Fiscal Year
Requested Funding Years & Amounts	Column A	Costs Components	Column B	*Other Expenses	Column C	
Year 1	8,400	Intangibles		Enter description		
Year 2	63,000	Equipment		Enter description		
Year 3	89,250	Design & Engineering	71,400	Enter description		
Year 4		Construction Expenses	89,250	Enter description		
Year 5		Other Expenses*		Enter description		
Column A Total	160,650	Column B Total	160,650	Column C Total		
Equipment Schedule						
		Yes	No	NA	x	
Description and Justification						
<p>The Trails Master Plan has outlined several projects, and this is one of the major improvement projects that is being moved forward for funding. The original estimate was developed in 2008 and updated by the consultant in September 2012. A 5% increase was added.</p> <p>The trail system that begins in the parking lot at Rosemary Pool and extends through the camp property and over to Nehoiden Street is used on a daily basis by residents in the area. The beginning section is the most urgent need for restoration, but there are other areas of concern, particularly along the steep stretch adjacent to the lake. Some projects would be completed by volunteers, so that only the large construction projects will need to be performed by a contractor. Under the revised legislation, this project is now eligible for CPA funding. A pre-feasibility study was added to insure that the original trail and any other options have been fully vetted. Permitting costs are included in the design phase.</p> <p>Park and Recreation is studying the future of the Rosemary Pool complex, so this project would be coordinated with any future renovations at Rosemary Lake and Pool. The Pool Complex was partially funded with federal Land and Water Conservation funds, and access to the property for residents is an important component to the rules related to funding.</p>						
FY2015-FY2018 Version						

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Department Capital Request CIP-DCR					
Title	Sewer Alarm System Upgrade	Department	Public Works-Sewer		
Parameters			YES	NO	NA
1.	Is this a stand-alone capital request?		X		
2.	Is this a multi-year capital replacement/upgrade request?			X	
3.	Is this a request in response to a documented public health or safety condition?			X	
4.	Is this a request in response to a Court, Federal, or State order?			X	
5.	Is this a request for a study or long range plan?			X	
6.	Is this a request to purchase office or school equipment (other than technology)?			X	
7.	Is this a request to purchase specialty equipment?			X	
8.	Is this a request to purchase technology or wireless communication system?		X		
9.	Is this a request to purchase vehicles or other rolling stock?			X	
10.	Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			X	
11.	Is this a request to improve or make repair to extend the useful life of a public building?			X	
12.	Is this a request to improve or replace public infrastructure: bridges, culverts, drainage, intersection, roads, sidewalks, sewers or water systems?		X		
13.	Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?			X	
14.	Will any other department be required to provide resources (other than fulfilling its responsibilities) at any point during the process in order to complete the project?			X	
15.	Are there recommendations or costs indentified by other departments that are NOT factored into the request?			X	
16.	Are there additional costs to purchase, install, implement, and/or use (except future year operating costs) that are NOT included in this request?			X	
17.	Are there additional costs to bid, design, construct, complete, and/or use (except future year operating costs) that are NOT included in this request?			X	
18.	Will the requested project increase the annual operating costs for ANY department?			X	
19.	Will the requested project require an increase in the operating budget of any department the year it is approved for funding?			X	
20.	If the requested project is funded, will there be a need for ongoing assistance from outside contractors at an added expense to the Town which is NOT already budgeted?		X		
21.	Will additional permanent staff be required if the request is approved?			X	
22.	If the project is funded is the current operating budget <b>sufficient</b> to cover the operating costs of the requested project?			X	
23.	If the requested project is funded, will it reduce the requesting department's operating costs?			X	
24.	Does the request support activities to produce <b>new</b> revenue for the Town?			X	
25.	If the request is not funded will <b>existing</b> Town revenue sources be negatively impacted?			X	
26.	Have other non-capital investment options been explored before submitting this request?			X	
27.	Is specialized training or annual licensing required that the Town will need to pay in order to use the asset (beyond the initial purchase/installation)?			X	
28.	If applicable, will the items being replaced be retained by the Town?			X	
29.	Does this request qualify for funding from Community Preservation Act (CPA)?			X	
30.	Are there any appendix forms with this funding request?			X	

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Department Capital Request CIP-DCR											
Title	<b>Sewer Alarm System Upgrade</b>					Department	<b>Public Works-Sewer</b>				
Useful Life	<b>III</b>		Primary Reason	<b>4</b>		Operating Budget Impact	<b>C</b>				
Requested Funding Years & Amounts	Column A		Costs Components	Column B		*Other Expenses	Column C				
FY2014			Intangibles								
FY2015	258,000		Equipment								
FY2016			Design & Engineering	68,000							
FY2017			Construction Expenses	190,000							
FY2018			Other Expenses*								
<b>Total</b>	<b>\$ 258,000</b>		<b>Total</b>	<b>\$258,000</b>		<b>Total</b>	<b>\$</b>				
Attached Schedules			CF	CX	LS	SI	SS				
Description and Justification											
<p>The Sewer Alarm system upgrade includes the implementation of a Supervisory Control &amp; Data Acquisition (SCADA) System. The Town's Sewer SCADA system will collect data from various sensors from all of the sewer lift stations that will enable operators to efficiently manage and control the operations of the station from a central or remote location. The upgraded alarm system will give dispatchers more details about the type of alarm, which will enable them to better prepare the call person when responding.</p> <p>A request for the funding a study for the sewer alarm upgrade was approved at the May 2012 Annual Town Meeting and was completed in the Fall of 2012. The FY15 cost estimate is for the implementation of the new SCADA system.</p> <p>The operating budget will need to be increased negligibly to account for a radio license, should the Town choose to have its own frequency, which is the recommended course of action at this time.</p>											
<b>FY2014-FY2018 Version</b>											

Town of Needham  
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Department Capital Request CIP-DCR								
Title	Sewer Main Extensions in Zone I and II	Department	Public Works-Sewer	Fiscal Year	2017			
Parameters						YES	NO	NA
1.	Is this a multi-year capital replacement/upgrade request?						X	
2.	Is this a request in response to a documented public health or safety condition?					X		
3.	Is this a request in response to a Court, Federal, or State order?						X	
4.	Is this a request for a study or long range plan?						X	
5.	Is this a request to purchase office or school equipment (other than technology)?						X	
6.	Is this a request to purchase specialty equipment?						X	
7.	Is this a request to purchase technology or wireless communication system?						X	
8.	Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						X	
9.	Is this a request to improve or make repair to extend the useful life of a public building?						X	
10.	Is this a request to improve or replace public infrastructure: bridges, culverts, drainage, intersection, roads, sidewalks, sewers or water systems?					X		
11.	Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						X	
12.	Will any other department be required to provide resources (other than fulfilling its responsibilities) at any point during the process in order to complete the project?						X	
13.	Are there recommendations or costs identified by other departments that are NOT factored into the request?						X	
14.	Are there additional costs to purchase, install, implement, and/or use (except future year operating costs) that are NOT included in this request?					X		
15.	Are there additional costs to bid, design, construct, complete, and/or use (except future year operating costs) that are NOT included in this request?						X	
16.	If approved, will this request increase the operating expense for any other department?						X	
17.	If approved, will this request require the need for ongoing assistance from vendors at an additional expense to the Town which is not already budgeted?					X		
18.	If approved, will additional permanent staff be required?						X	
19.	If approved, is the current operating budget sufficient to cover the operating costs of the requested project?						X	
20.	If approved, will this request lower the requesting department's operating costs?						X	
21.	Does the request support activities to produce <b>new</b> revenue for the Town?						X	
22.	If the request is not funded will <b>existing</b> Town revenue sources be negatively impacted?						X	
23.	Have other non-capital investment options been explored before submitting this request?						X	
24.	Is specialized training or annual licensing required that the Town will need to pay in order to use the asset (beyond the initial purchase/installation)?						X	
25.	If applicable, will the items being replaced be retained by the Town?						X	
26.	Does this request qualify for funding from Community Preservation Act (CPA)?						X	
27.	Are there any appendix forms with this funding request?						X	

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Department Capital Request CIP-DCR										
Title	Sewer Main Extensions in Zone I and II				Department	Public Works-Sewer			Fiscal Year	2017
Useful Life	V	Primary Reason	1	Operating Budget Impact	C					
Requested Funding Years & Amounts	Column A	Costs Components	Column B	*Other Expenses	Column C					
Year 1	73,860	Intangibles		Enter description						
Year 2	492,400	Equipment		Enter description						
Year 3		Design & Engineering	73,860	Enter description						
Year 4		Construction Expenses	492,400	Enter description						
Year 5		Other Expenses*		Enter description						
Column A Total	<b>\$566,260</b>	Column B Total	<b>\$566,260</b>	Column C Total						
Description and Justification										
<p>There are eight homes in Needham that need to be prioritized for sewer service connection because they are within DEP's Zone II areas. These homes are being looked at as part of a future sewer main extension/ service connections project.</p> <p>The Zone I and Zone II aquifer protection area for the Charles River Well No. 1 encompasses an area that includes private septic systems. Zone I, as defined by MassDEP includes land within the protective four hundred (400) foot radius around an existing or potential public water supply well or well field. Zone II, which includes that area of an aquifer which contributes water to an existing well under the most severe pumping and recharge conditions that can be or realistically anticipated (180 days of pumping at safe yield, with no recharge from precipitation). It is bounded by the groundwater divides which result from pumping the well and by the contact of the aquifer with less permeable materials such as till or bedrock. Note; these private systems predate the Zone I and II requirements by MassDEP and Needham Zoning Bylaws, Section 3.4.6 (b).</p> <p>All three of Needham's wells are located in an area that is vulnerable to contamination from nearby septic systems, and extending the sewer main to allow access to homes within Zones I &amp; II will greatly reduce this risk.</p> <p>The sewer main ends at 827 Charles River St, the sewer main extension would run from 828 Charles River St to Winding River Road and extend 712 feet up Winding River Rd. The new sewer main will pick up 5 homes that are on septic, 4 of which are on Winding River Rd. These improvements would be subject to a betterment fee.</p>										

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Department Capital Request CIP-DCR					
Title	Sewer Main Extensions in Zone I and II	Department	Public Works-Sewer	Fiscal Year	2017
<p>Monies requested are based on 712 linear feet of 8" gravity sewer pipe installation at a cost of \$200 per linear foot, which includes the installation of five sewer manholes; the cost of a pump station similar in size to Lake Drive Pump Station at \$350,000; and design and engineering costs of 15% of total project.</p>					
FY17	Engineering & Design			\$73,860	
FY18	Construction			\$492,400	
<p>Additional operating budget funds will be required after this project is constructed in order to operate the new main which include electrical and maintenance costs of the pumps, mechanicals seals, valves, wet cleanings, and other maintenance costs.</p>					
FY2015-FY2018 Version					

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Department Capital Request CIP-DCR								
Title	Sewer Service Connections	Department	Public Works – Sewer	Fiscal Year	2015			
Parameters						YES	NO	NA
1. Is this a multi-year capital replacement/upgrade request?					X			
2. Is this a request in response to a documented public health or safety condition?						X		
3. Is this a request in response to a Court, Federal, or State order?						X		
4. Is this a request for a study or long range plan?						X		
5. Is this a request to purchase office or school equipment (other than technology)?						X		
6. Is this a request to purchase specialty equipment?						X		
7. Is this a request to purchase technology or wireless communication system?						X		
8. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						X		
9. Is this a request to improve or make repair to extend the useful life of a public building?						X		
10. Is this a request to improve or replace public infrastructure: bridges, culverts, drainage, intersection, roads, sidewalks, sewers or water systems?				X				
11. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						X		
12. Will any other department be required to provide resources (other than fulfilling its responsibilities) at any point during the process in order to complete the project?						X		
13. Are there recommendations or costs identified by other departments that are NOT factored into the request?						X		
14. Are there additional costs to purchase, install, implement, and/or use (except future year operating costs) that are NOT included in this request?						X		
15. Are there additional costs to bid, design, construct, complete, and/or use (except future year operating costs) that are NOT included in this request?						X		
16. If approved, will this request increase the operating expense for any other department?						X		
17. If approved, will this request require the need for ongoing assistance from vendors at an additional expense to the Town which is not already budgeted?						X		
18. If approved, will additional permanent staff be required?						X		
19. If approved, is the current operating budget sufficient to cover the operating costs of the requested project?				X				
20. If approved, will this request lower the requesting department's operating costs?						X		
21. Does the request support activities to produce new revenue for the Town?						X		
22. If the request is not funded will existing Town revenue sources be negatively impacted?						X		
23. Have other non-capital investment options been explored before submitting this request?				X				
24. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset (beyond the initial purchase/installation)?						X		
25. If applicable, will the items being replaced be retained by the Town?						X		
26. Does this request qualify for funding from Community Preservation Act (CPA)?						X		
27. Are there any appendix forms with this funding request?						X		
Useful Life	V	Primary Reason	4	Operating Budget Impact		C		

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Department Capital Request CIP-DCR						
Title	Sewer Service Connections		Department	Public Works – Sewer		Fiscal Year
Requested Funding Years & Amounts	Column A	Costs Components	Column B		*Other Expenses	Column C
Year 1	50,000	Intangibles			Enter description	
Year 2	50,000	Equipment			Enter description	
Year 3	50,000	Design & Engineering			Enter description	
Year 4	50,000	Construction Expenses		250,000	Enter description	
Year 5	50,000	Other Expenses*			Enter description	
Column A Total	<b>\$250,000</b>	Column B Total		<b>\$250,000</b>	Column C Total	
Equipment Schedule						
	Yes	No	NA	X		
Description and Justification						
<p>There are 108 homes with access to sewer that are not connected to the Sewer System because they have chosen not to. The purpose of this request is to provide the lateral sewer line from the sewer main to the property line so that the homeowner can connect should they choose to or should their septic system fail. The lateral sewer line is to be added prior (at least one year) to a road reconstruction/paving project. The cost for these service installations are typically not included in road construction estimates. In the case of Chapter 90 Projects, these are not considered as a reimbursement eligible expense. These expenses are included in local road reconstruction estimates. There is a corresponding request for water service connections.</p> <p>Past projects</p> <ul style="list-style-type: none"> <li>• 2013 – installed 14 new sewer laterals installed (408.5' of pipe)</li> </ul>						
FY2015-FY2018 Version						

Town of Needham  
Capital Improvement Plan  
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Department Capital Request CIP-DCR								
Title	Drain System Improvements – Water Quality (EPA)	Department	Public Works – Drains	Fiscal Year	2015			
Parameters						YES	NO	NA
1. Is this a multi-year capital replacement/upgrade request?						X		
2. Is this a request in response to a documented public health or safety condition?							X	
3. Is this a request in response to a Court, Federal, or State order?						X		
4. Is this a request for a study or long range plan?						X		
5. Is this a request to purchase office or school equipment (other than technology)?							X	
6. Is this a request to purchase specialty equipment?							X	
7. Is this a request to purchase technology or wireless communication system?							X	
8. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							X	
9. Is this a request to improve or make repair to extend the useful life of a public building?							X	
10. Is this a request to improve or replace public infrastructure: bridges, culverts, drainage, intersection, roads, sidewalks, sewers or water systems?						X		
11. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							X	
12. Will any other department be required to provide resources (other than fulfilling its responsibilities) at any point during the process in order to complete the project?							X	
13. Are there recommendations or costs identified by other departments that are NOT factored into the request?							X	
14. Are there additional costs to purchase, install, implement, and/or use (except future year operating costs) that are NOT included in this request?							X	
15. Are there additional costs to bid, design, construct, complete, and/or use (except future year operating costs) that are NOT included in this request?							X	
16. If approved, will this request increase the operating expense for any other department?							X	
17. If approved, will this request require the need for ongoing assistance from vendors at an additional expense to the Town which is not already budgeted?							X	
18. If approved, will additional permanent staff be required?							X	
19. If approved, is the current operating budget sufficient to cover the operating costs of the requested project?						X		
20. If approved, will this request lower the requesting department's operating costs?							X	
21. Does the request support activities to produce new revenue for the Town?							X	
22. If the request is not funded will existing Town revenue sources be negatively impacted?							X	
23. Have other non-capital investment options been explored before submitting this request?						X		
24. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset (beyond the initial purchase/installation)?							X	
25. If applicable, will the items being replaced be retained by the Town?							X	
26. Does this request qualify for funding from Community Preservation Act (CPA)?							X	
27. Are there any appendix forms with this funding request?							X	
Useful Life	V	Primary Reason	2	Operating Budget Impact				C

Town of Needham  
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January 2014

Department Capital Request CIP-DCR						
Title	Drain System Improvements – Water Quality (EPA)		Department	Public Works – Drains		Fiscal Year
						2015
Requested Funding Years & Amounts	Column A	Costs Components	Column B		*Other Expenses	Column C
Year 1	80,000	Intangibles			Enter description	
Year 2	79,000	Equipment			Enter description	
Year 3	118,000	Design & Engineering	316,000		Enter description	
Year 4	2,000,000	Construction Expenses	2,079,000		Enter description	
Year 5	118,000	Other Expenses*			Enter description	
Column A Total	<b>\$2,395,000</b>	Column B Total	<b>\$2,395,000</b>		Column C Total	
Equipment Schedule						
	Yes	No	NA	X		
Description and Justification						
<p>In 1995, the DPW was under order from the EPA to embark on a stormwater discharge investigation for all illicit discharges to the Charles River. Illicit discharges identified in this investigation were pursued and corrective actions were undertaken to eliminate them beginning in 1996 and 1997. This investigation resulted in the Town entering into a Memorandum of Understanding (MOU) with the EPA to commence a Town-wide investigation, and to the development of a Stormwater Master Plan. This Master Plan was completed in 2002. Incorporated into this Stormwater Master Plan are improvements to the Stormwater Drainage System to upgrade the quality of the water discharged into the Charles River in Needham. Further investigation and sampling continues year to year.</p> <p>When the 2003 EPA NPDES Stormwater Discharge Permit took effect, it incorporated several requirements identified in the MOU. There were a number of projects proposed to manage stormwater quality effectively. The second permit to be issued by the EPA is overdue and is expected in the current fiscal year.</p> <p>Past projects completed to improve stormwater discharge with a variety of methods are</p> <ul style="list-style-type: none"> <li>• Town Library</li> <li>• High School</li> <li>• Chestnut Street Reconstruction</li> <li>• High Rock School</li> <li>• Lake Drive</li> </ul> <p>Design completed, awaiting construction</p> <ul style="list-style-type: none"> <li>• DPW Drainage improvements</li> <li>• Sportsmen’s Pond/Rosemary Glen</li> </ul>						

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Department Capital Request CIP-DCR					
Title	<b>Drain System Improvements – Water Quality (EPA)</b>	Department	<b>Public Works – Drains</b>	Fiscal Year	<b>2015</b>
<p>FY15 – Water Shed Management Plan \$80,000</p> <p>FY16 - DPW Facility SWMP, Construction \$79,000</p> <p>FY17 – Rosemary Lake Sediment Removal – Engineering &amp; Design \$118,000 The DPW is investigating whether the Rosemary project is eligible for Community Preservation funding.</p> <p>FY18 – Rosemary Lake Sediment Removal – Construction \$1,000,000 to \$2,000,000</p> <p>FY19 - Sportsmen’s Pond/Rosemary Glen - Engineering &amp; Design \$118,000</p> <p><u>Future Years</u></p> <p>-Sportsmen’s Pond/Rosemary Glen - Construction \$621,000</p>					
					FY2015-FY2018 Version

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Department Capital Request CIP-DCR							
Title	<b>Drain System Repairs– Repair Infrastructure</b>	Department	<b>Public Works – Drains</b>	Fiscal Year	<b>2015</b>		
Parameters					YES	NO	NA
1.	Is this a multi-year capital replacement/upgrade request?				X		
2.	Is this a request in response to a documented public health or safety condition?					X	
3.	Is this a request in response to a Court, Federal, or State order?					X	
4.	Is this a request for a study or long range plan?					X	
5.	Is this a request to purchase office or school equipment (other than technology)?					X	
6.	Is this a request to purchase specialty equipment?					X	
7.	Is this a request to purchase technology or wireless communication system?					X	
8.	Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?					X	
9.	Is this a request to improve or make repair to extend the useful life of a public building?					X	
10.	Is this a request to improve or replace public infrastructure: bridges, culverts, drainage, intersection, roads, sidewalks, sewers or water systems?				X		
11.	Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?					X	
12.	Will any other department be required to provide resources (other than fulfilling its responsibilities) at any point during the process in order to complete the project?					X	
13.	Are there recommendations or costs identified by other departments that are NOT factored into the request?					X	
14.	Are there additional costs to purchase, install, implement, and/or use (except future year operating costs) that are NOT included in this request?					X	
15.	Are there additional costs to bid, design, construct, complete, and/or use (except future year operating costs) that are NOT included in this request?					X	
16.	If approved, will this request increase the operating expense for any other department?					X	
17.	If approved, will this request require the need for ongoing assistance from vendors at an additional expense to the Town which is not already budgeted?					X	
18.	If approved, will additional permanent staff be required?					X	
19.	If approved, is the current operating budget sufficient to cover the operating costs of the requested project?				X		
20.	If approved, will this request lower the requesting department's operating costs?					X	
21.	Does the request support activities to produce <b>new</b> revenue for the Town?					X	
22.	If the request is not funded will <b>existing</b> Town revenue sources be negatively impacted?					X	
23.	Have other non-capital investment options been explored before submitting this request?				X		
24.	Is specialized training or annual licensing required that the Town will need to pay in order to use the asset (beyond the initial purchase/installation)?					X	
25.	If applicable, will the items being replaced be retained by the Town?					X	
26.	Does this request qualify for funding from Community Preservation Act (CPA)?					X	
27.	Are there any appendix forms with this funding request?					X	

Town of Needham  
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 Department Capital Request  
 January 2014  
 CIP-DCR

Town of Needham Capital Improvement Plan Department Capital Request January 2014 CIP-DCR										
Title	Drain System Repairs– Repair Infrastructure				Department	Public Works – Drains			Fiscal Year	2015
Useful Life	5		Primary Reason		3		Operating Budget Impact			C
Requested Funding Years & Amounts	Column A		Costs Components	Column B		*Other Expenses		Column C		
Year 1	76,000		Intangibles			Wetland Consulting		82,000		
Year 2	168,500		Equipment			Enter description				
Year 3	80,000		Design & Engineering	72,500		Enter description				
Year 4			Construction Expenses	170,000		Enter description				
Year 5			Other Expenses*	82,000		Enter description				
Column A Total	\$324,500		Column B Total	\$324,500		Column C Total		\$82,000		
<b>Description and Justification</b>										
<p>This request is to replace drainage infrastructure within Town easements that are discovered through investigation work. This request is part of the Town’s plan to identify and improve drainage throughout the Town.</p> <p>The first project is the replacement of 10 feet of pipe underneath a culvert on Edgewater Drive. This pipe is particularly problematic. It is over 100 years of age, and is plugged-up and degraded beyond remediation. This pipe is presently supporting two sewage pipes, one that is in service, and one that is abandoned in place. The drainage pipe and one of the active sewage pipes are all uncovered due to erosion and the drainage pipe is providing the structural foundation for the sewage pipes. Should the drainage pipe be compromised, it would make the sewage pipes it supports also subject to failure. This replacement includes extensive wetland consulting and permitting which is a major factor in the cost of this project. Additionally, this drainage pipe needs to be constructed under the existing sewage pipes adding to the difficulty of this replacement. This repair will resolve drainage issues in the area that has resulted in flooding of the abutters of the brook, and will ensure the structural stability of the adjacent sewage pipes.</p> <p>The second project is to replace a badly damaged 100 foot section of 18” reinforced concrete drain pipe within a Town easement adjacent to 470 South Street. This replacement includes extensive wetland consulting and permitting which is a major factor in the cost of this project.</p> <p>FY15 – Edgewater Area Culvert - Design &amp; Wetland Consulting \$76,000</p> <p>FY16 – Edgewater Area Culvert - Construction \$90,000.                      470 South Street, Design &amp; Wetland Consulting \$78,500</p> <p>FY17 – 470 South Street, Construction \$80,000</p>										
FY2015-FY2018 Version										

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Department Capital Request CIP-DCR								
Title	Sewer Pump Station Improvements/Replacement	Department	Public Works – Sewer	Fiscal Year	2015			
Parameters						YES	NO	NA
1.	Is this a multi-year capital replacement/upgrade request?					X		
2.	Is this a request in response to a documented public health or safety condition?						X	
3.	Is this a request in response to a Court, Federal, or State order?						X	
4.	Is this a request for a study or long range plan?						X	
5.	Is this a request to purchase office or school equipment (other than technology)?						X	
6.	Is this a request to purchase specialty equipment?						X	
7.	Is this a request to purchase technology or wireless communication system?						X	
8.	Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						X	
9.	Is this a request to improve or make repair to extend the useful life of a public building?						X	
10.	Is this a request to improve or replace public infrastructure: bridges, culverts, drainage, intersection, roads, sidewalks, sewers or water systems?					X		
11.	Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						X	
12.	Will any other department be required to provide resources (other than fulfilling its responsibilities) at any point during the process in order to complete the project?						X	
13.	Are there recommendations or costs identified by other departments that are NOT factored into the request?						X	
14.	Are there additional costs to purchase, install, implement, and/or use (except future year operating costs) that are NOT included in this request?						X	
15.	Are there additional costs to bid, design, construct, complete, and/or use (except future year operating costs) that are NOT included in this request?						X	
16.	If approved, will this request increase the operating expense for any other department?						X	
17.	If approved, will this request require the need for ongoing assistance from vendors at an additional expense to the Town which is not already budgeted?						X	
18.	If approved, will additional permanent staff be required?						X	
19.	If approved, is the current operating budget sufficient to cover the operating costs of the requested project?					X		
20.	If approved, will this request lower the requesting department's operating costs?						X	
21.	Does the request support activities to produce <b>new</b> revenue for the Town?						X	
22.	If the request is not funded will <b>existing</b> Town revenue sources be negatively impacted?						X	
23.	Have other non-capital investment options been explored before submitting this request?						X	
24.	Is specialized training or annual licensing required that the Town will need to pay in order to use the asset (beyond the initial purchase/installation)?						X	
25.	If applicable, will the items being replaced be retained by the Town?						X	
26.	Does this request qualify for funding from Community Preservation Act (CPA)?						X	
27.	Are there any appendix forms with this funding request?						X	

Town of Needham  
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Department Capital Request CIP-DCR										
Title	Sewer Pump Station Improvements/Replacement				Department	Public Works – Sewer			Fiscal Year	2015
Useful Life	V		Primary Reason	4		Operating Budget Impact	C			
Requested Funding Years & Amounts	Column A	Costs Components	Column B	*Other Expenses	Column C					
Year 1	90,000	Intangibles		Enter description						
Year 2	333,000	Equipment		Enter description						
Year 3	0	Design & Engineering	102,180	Enter description						
Year 4	348,200	Construction Expenses	669,020	Enter description						
Year 5	0	Other Expenses*		Enter description						
Column A Total	<b>\$771,200</b>	Column B Total	<b>\$771,200</b>	Column C Total						
Equipment Schedule										
		Yes		No		NA	X			
Description and Justification										
<p>As part of the Wastewater System Master Plan, several of the wastewater pumping stations were evaluated to assess their physical condition and capacity, and to evaluate current and future flow projections. The Master Plan recommended that at least 7 of the 10 stations be upgraded. These included major improvements and replacement of the Reservoir St. "B" Station (this is the 2nd oldest station in the system). The station has been designed and construction began in the Spring of 2012.</p> <p>The Kendrick St. Station had been renovated to accommodate some of the initial redevelopment currently underway in the New England business district and the 350 residential units at 300 Second Avenue (Charles River Landing) tributary to this station. The West Street Station was completed 2000. The Great Plain Avenue Station was completed in 2010.</p> <p>Canister pump stations at Lake Drive, Cooks Bridge (Milo Circle), Warren Street and Reservoir "A" are each either at or beyond their design life. Constant maintenance and emergency shutoffs occur more frequently and require greater amounts of personnel time and emergency funds to keep running.</p> <p>Alden Road Pump Station was originally constructed in the mid- 1950's as a pneumatic ejection station, converted in the 1970's to a built in place wet well/dry well type station with vertical flooded suction sewage pumps. There are no alarms with the exception of a local red light alarm for high wet well level. The pump's outdated electrical control panels are located below grade level adjacent to the pumps, which if flooded, poses a severe threat to personnel as well equipment. The station has heat, but no dehumidifier or ventilation. Problems have also occurred with roots and rags clogging pumps.</p>										

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Department Capital Request CIP-DCR					
Title	Sewer Pump Station Improvements/Replacement	Department	Public Works – Sewer	Fiscal Year	2015
<p>The schedule for the CIP has been adjusted based on the changing needs of these stations. The schedule for improvement/replacement has been extended to better accommodate appropriate work levels. Additionally, in 2012 repairs were made to Cooks Bridge that will extend the life of the station allowing the work to be pushed back from FY15/FY16.</p> <p>The West St Pump Station has been added to the FY 15 submission due to the need to replace a programmable logistic controller (PLC). The PLC received input data from various sensors that is used for the automation of electromechanical processes within the pump station. The PLC also stores important data. The station is currently operating with a back-up controller that is basic in design. It controls the on/off operations of the pump only. The controller does not record data (flows and alarms) and there is no digital display of the operations (wet well level, mode of operations, etc.).</p>					
FY15	West St – PLC Replacement			\$90,000	
FY 16	Reservoir St. "A" – Engineering, Design & Construction			\$333,000	
FY 18	Alden Rd – Engineering, Design, & Construction			\$348,200	
<u>Out Years:</u>					
FY 20	Lake Drive – Engineering, Design & Construction			\$382,500	
FY 21	Cooks Bridge - Engineering & Design			\$345,000	
FY 22	Cooks Bridge - Construction			\$3,370,500	
FY2015-FY2018 Version					

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Department Capital Request CIP-DCR								
Title	14 inch Water Main Replacement		Department	Public Works-Water				
Parameters						YES	NO	NA
1. Is this a stand-alone capital request?						X		
2. Is this a multi-year capital replacement/upgrade request?						X		
3. Is this a request in response to a documented public health or safety condition?							X	
4. Is this a request in response to a Court, Federal, or State order?							X	
5. Is this a request for a study or long range plan?							X	
6. Is this a request to purchase office or school equipment (other than technology)?							X	
7. Is this a request to purchase specialty equipment?							X	
8. Is this a request to purchase technology or wireless communication system?							X	
9. Is this a request to purchase vehicles or other rolling stock?							X	
10. Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?							X	
11. Is this a request to improve or make repair to extend the useful life of a public building?							X	
12. Is this a request to improve or replace public infrastructure: bridges, culverts, drainage, intersection, roads, sidewalks, sewers or water systems?						X		
13. Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?							X	
14. Will any other department be required to provide resources (other than fulfilling its responsibilities) at any point during the process in order to complete the project?							X	
15. Are there recommendations or costs indentified by other departments that are NOT factored into the request?							X	
16. Are there additional costs to purchase, install, implement, and/or use (except future year operating costs) that are NOT included in this request?							X	
17. Are there additional costs to bid, design, construct, complete, and/or use (except future year operating costs) that are NOT included in this request?							X	
18. Will the requested project increase the annual operating costs for ANY department?							X	
19. Will the requested project require an increase in the operating budget of any department the year it is approved for funding?							X	
20. If the requested project is funded, will there be a need for ongoing assistance from outside contractors at an added expense to the Town which is NOT already budgeted?							X	
21. Will additional permanent staff be required if the request is approved?							X	
22. If the project is funded is the current operating budget <b>sufficient</b> to cover the operating costs of the requested project?						X		
23. If the requested project is funded, will it reduce the requesting department's operating costs?							X	
24. Does the request support activities to produce <b>new</b> revenue for the Town?							X	
25. If the request is not funded will <b>existing</b> Town revenue sources be negatively impacted?							X	
26. Have other non-capital investment options been explored before submitting this request?							X	
27. Is specialized training or annual licensing required that the Town will need to pay in order to use the asset (beyond the initial purchase/installation)?							X	
28. If applicable, will the items being replaced be retained by the Town?							X	
29. Does this request qualify for funding from Community Preservation Act (CPA)?							X	
30. Are there any appendix forms with this funding request?							X	

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Department Capital Request CIP-DCR												
Title	14 inch Water Main Replacement					Department	Public Works-Water					
Useful Life	V	Primary Reason			3,5	Operating Budget Impact			C			
Requested Funding Years & Amounts	Column A		Costs Components		Column B		*Other Expenses		Column C			
FY2014			Intangibles									
FY2015			Equipment									
FY2016			Design & Engineering		400,000							
FY2017			Construction Expenses									
FY2018		400,000	Other Expenses*									
<b>Total</b>		<b>\$400,000</b>		<b>Total</b>	<b>\$400,000</b>			<b>Total</b>				
Attached Schedules												
		CF		CX		LS		SI		SS		
Description and Justification												
<p>This request it to replace a total of 11,500 linear feet of 14" water main. The existing water line dates from 1936-1939 and is cast iron with bitumastic or coal tar liner. The water quality in areas serviced by this line is a concern as the lining of these pipes breaks down over time causing discoloration in the water. In 2008, the Town began addressing areas served by this type of piping which at the time was approximately 19,000 linear feet extending from Charles River Street, to Pine Street, to Central Avenue, to Marked Tree Road and a section between Oak Street and Chestnut Street, to School Street.</p> <p>In 2008, the 14" water main was relined from the Charles River Water Treatment Facility to Grove Street. In 2010, the second phase of this project replaced the 14" water main with a new 16" water main extending from Grove Street to Central Avenue.</p> <p>This project includes replacing the pipe and reconstructing the road.</p> <p><b>FY 2018</b></p> <p>Funding is proposed for the design of the remaining 11,500 linear feet of water main to be replaced from the intersection of Pine Street and Central Avenue to the intersection of School Street and Chestnut Street. Engineering and Design:                      \$400,000</p> <p><b>FY 2020</b></p> <p>Funding is proposed for the construction of the remaining water main. Construction:                      \$4,000,000</p> <p>SRF Funding may be available for this project and Public Works will submit an application to complete the project.</p>												
FY2014-FY2018 Version												

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Department Capital Request CIP-DCR						
Title	Water Supply Development	Department	Public Works-Water			
Parameters				YES	NO	NA
1.	Is this a stand-alone capital request?			X		
2.	Is this a multi-year capital replacement/upgrade request?				X	
3.	Is this a request in response to a documented public health or safety condition?				X	
4.	Is this a request in response to a Court, Federal, or State order?				X	
5.	Is this a request for a study or long range plan?				X	
6.	Is this a request to purchase office or school equipment (other than technology)?				X	
7.	Is this a request to purchase specialty equipment?				X	
8.	Is this a request to purchase technology or wireless communication system?				X	
9.	Is this a request to purchase vehicles or other rolling stock?				X	
10.	Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?				X	
11.	Is this a request to improve or make repair to extend the useful life of a public building?				X	
12.	Is this a request to improve or replace public infrastructure: bridges, culverts, drainage, intersection, roads, sidewalks, sewers or water systems?			X		
13.	Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?				X	
14.	Will any other department be required to provide resources (other than fulfilling its responsibilities) at any point during the process in order to complete the project?				X	
15.	Are there recommendations or costs indentified by other departments that are NOT factored into the request?				X	
16.	Are there additional costs to purchase, install, implement, and/or use (except future year operating costs) that are NOT included in this request?				X	
17.	Are there additional costs to bid, design, construct, complete, and/or use (except future year operating costs) that are NOT included in this request?				X	
18.	Will the requested project increase the annual operating costs for ANY department?				X	
19.	Will the requested project require an increase in the operating budget of any department the year it is approved for funding?				X	
20.	If the requested project is funded, will there be a need for ongoing assistance from outside contractors at an added expense to the Town which is NOT already budgeted?				X	
21.	Will additional permanent staff be required if the request is approved?				X	
22.	If the project is funded is the current operating budget <b>sufficient</b> to cover the operating costs of the requested project?			X		
23.	If the requested project is funded, will it reduce the requesting department's operating costs?				X	
24.	Does the request support activities to produce <b>new</b> revenue for the Town?				X	
25.	If the request is not funded will <b>existing</b> Town revenue sources be negatively impacted?				X	
26.	Have other non-capital investment options been explored before submitting this request?				X	
27.	Is specialized training or annual licensing required that the Town will need to pay in order to use the asset (beyond the initial purchase/installation)?				X	
28.	If applicable, will the items being replaced be retained by the Town?				X	
29.	Does this request qualify for funding from Community Preservation Act (CPA)?				X	
30.	Are there any appendix forms with this funding request?				X	

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Department Capital Request CIP-DCR													
Title	Water Supply Development						Department	Public Works-Water					
Useful Life	V	Primary Reason			4	Operating Budget Impact			B				
Requested Funding Years & Amounts	Column A		Costs Components		Column B		*Other Expenses		Column C				
FY2014			Intangibles										
FY2015		200,000	Equipment										
FY2016		500,000	Design & Engineering		200,000								
FY2017			Construction Expenses		500,000								
FY2018			Other Expenses*										
<b>Total</b>		<b>\$700,000</b>		<b>Total</b>	<b>\$700,000</b>		<b>Total</b>	<b>\$</b>					
Attached Schedules													
	CF		CX			LS		SI		SS			
Description and Justification													
<p><b>Replacement of Well #3</b></p> <p>In April 2013 the Town redeveloped Well # 3 and was able to restore the yield of the well to approximately one third of its original capacity. The original capacity of the well was 50 gallons per foot, and the redevelopment was able to bring the well up to 18 gallons per foot. Prior to the redevelopment the yield of the well was 5 gallons per foot, and this had been redeveloped in 2009. Since this last redevelopment in April 2013, the well is already showing signs of losing further capacity, and is pumping 15 gallons per foot as of September 2013. This well is the least productive of the three wells.</p> <p>The Water &amp; Sewer Division is recommending that this funding request, that had initially been submitted for the development of a fourth well be redirected to the replacement of Well #3. The permitting process with MassDEP for this replacement, rather than the establishment of a new well, would be considerably shorter, 1-2 years, rather than the 7-10 year process for establishing a new well. The funding for FY 15 would be for the design and engineering of a replacement well, and the funding for FY 16 would be for the construction of that well.</p> <p>Proposed Well #4 – Future Project</p> <p>This project would be to install a fourth well at the Charles River Well Field that will provide for reliability and redundancy while other wells are taken offline for routine maintenance or repair. The Well Field is presently at full capacity when all three wells are operational. This fourth well would allow the Town to continue to operate to its full capacity. Previously, when the system as at peak demand and a well was taken offline, the Town had to rely on MWRA water source to meet its daily demands. This redundant well will allow the Town to be more independent even during routine maintenance periods. A feasibility study was completed in FY 2011 that supports the development of an additional well in the Town’s existing well field.</p> <p>The development of a fourth well should be delayed until Well #3 is replaced.</p>													
												FY2014-FY2018 Version	

Town of Needham  
Capital Improvement Plan  
January 2014

Department Capital Request CIP-DCR							
Title	Water Service Connections	Department	Public Works – Water	Fiscal Year	2015		
Parameters					YES	NO	NA
1.	Is this a multi-year capital replacement/upgrade request?				X		
2.	Is this a request in response to a documented public health or safety condition?				X		
3.	Is this a request in response to a Court, Federal, or State order?					X	
4.	Is this a request for a study or long range plan?					X	
5.	Is this a request to purchase office or school equipment (other than technology)?					X	
6.	Is this a request to purchase specialty equipment?					X	
7.	Is this a request to purchase technology or wireless communication system?					X	
8.	Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?					X	
9.	Is this a request to improve or make repair to extend the useful life of a public building?					X	
10.	Is this a request to improve or replace public infrastructure: bridges, culverts, drainage, intersection, roads, sidewalks, sewers or water systems?				X		
11.	Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?					X	
12.	Will any other department be required to provide resources (other than fulfilling its responsibilities) at any point during the process in order to complete the project?					X	
13.	Are there recommendations or costs identified by other departments that are NOT factored into the request?					X	
14.	Are there additional costs to purchase, install, implement, and/or use (except future year operating costs) that are NOT included in this request?					X	
15.	Are there additional costs to bid, design, construct, complete, and/or use (except future year operating costs) that are NOT included in this request?					X	
16.	If approved, will this request increase the operating expense for any other department?					X	
17.	If approved, will this request require the need for ongoing assistance from vendors at an additional expense to the Town which is not already budgeted?					X	
18.	If approved, will additional permanent staff be required?					X	
19.	If approved, is the current operating budget sufficient to cover the operating costs of the requested project?				X		
20.	If approved, will this request lower the requesting department's operating costs?					X	
21.	Does the request support activities to produce <b>new</b> revenue for the Town?					X	
22.	If the request is not funded will <b>existing</b> Town revenue sources be negatively impacted?					X	
23.	Have other non-capital investment options been explored before submitting this request?					X	
24.	Is specialized training or annual licensing required that the Town will need to pay in order to use the asset (beyond the initial purchase/installation)?					X	
25.	If applicable, will the items being replaced be retained by the Town?					X	
26.	Does this request qualify for funding from Community Preservation Act (CPA)?					X	
27.	Are there any appendix forms with this funding request?					X	

Town of Needham  
Capital Improvement Plan  
January 2014

Department Capital Request CIP-DCR																							
Title	Water Service Connections				Department	Public Works – Water			Fiscal Year	2015													
Useful Life	15	Primary Reason			3	Operating Budget Impact			C														
Requested Funding Years & Amounts	Column A		Costs Components	Column B		*Other Expenses	Column C																
Year 1	200,000	Intangibles				Enter description																	
Year 2	200,000	Equipment				Enter description																	
Year 3	200,000	Design & Engineering				Enter description																	
Year 4	200,000	Construction Expenses			1,000,000	Enter description																	
Year 5	200,000	Other Expenses*				Enter description																	
Column A Total	1,000,000	Column B Total			1,000,000	Column C Total																	
Equipment Schedule																							
	Yes		No		NA	X																	
Description and Justification																							
<p>The primary purpose of this program is to remove old iron pipe water services that may contain lead from the water distribution system. Old water services are to be replaced prior (at least one year) to a road reconstruction/paving project. If this project is not funded it leaves an element of the subsurface infrastructure susceptible to failure before the useful life of the reconstructed roadway has been realized. Prior appropriations are currently under contract with water service connection replacements estimated to be one and a half years ahead of the road resurfacing program. The FY 2014 funding will provide approximately one year's value of water service replacements, which will fall in line with the road resurfacing program schedule. System wide, there are approximately 2,500 services that still need to be replaced in the system.</p>																							
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">Year</th> <th style="width: 80%;">Number of Services Replaced</th> </tr> </thead> <tbody> <tr> <td>CY 2007</td> <td style="text-align: center;">126</td> </tr> <tr> <td>CY 2008</td> <td style="text-align: center;">170</td> </tr> <tr> <td>CY 2009</td> <td style="text-align: center;">174</td> </tr> <tr> <td>CY 2010</td> <td style="text-align: center;">17</td> </tr> <tr> <td>CY 2011</td> <td style="text-align: center;">145</td> </tr> <tr> <td>CY 2012</td> <td style="text-align: center;">102</td> </tr> </tbody> </table>										Year	Number of Services Replaced	CY 2007	126	CY 2008	170	CY 2009	174	CY 2010	17	CY 2011	145	CY 2012	102
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CY 2010	17																						
CY 2011	145																						
CY 2012	102																						
FY2015-FY2018 Version																							

Town of Needham  
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Department Capital Request CIP-DCR							
Title	Filter Media Replacement	Department	Public Works – Water	Fiscal Year	2015		
Parameters					YES	NO	NA
1.	Is this a multi-year capital replacement/upgrade request?					X	
2.	Is this a request in response to a documented public health or safety condition?				X		
3.	Is this a request in response to a Court, Federal, or State order?					X	
4.	Is this a request for a study or long range plan?					X	
5.	Is this a request to purchase office or school equipment (other than technology)?					X	
6.	Is this a request to purchase specialty equipment?					X	
7.	Is this a request to purchase technology or wireless communication system?					X	
8.	Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?					X	
9.	Is this a request to improve or make repair to extend the useful life of a public building?					X	
10.	Is this a request to improve or replace public infrastructure: bridges, culverts, drainage, intersection, roads, sidewalks, sewers or water systems?				X		
11.	Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?					X	
12.	Will any other department be required to provide resources (other than fulfilling its responsibilities) at any point during the process in order to complete the project?					X	
13.	Are there recommendations or costs identified by other departments that are NOT factored into the request?					X	
14.	Are there additional costs to purchase, install, implement, and/or use (except future year operating costs) that are NOT included in this request?					X	
15.	Are there additional costs to bid, design, construct, complete, and/or use (except future year operating costs) that are NOT included in this request?					X	
16.	If approved, will this request increase the operating expense for any other department?					X	
17.	If approved, will this request require the need for ongoing assistance from vendors at an additional expense to the Town which is not already budgeted?					X	
18.	If approved, will additional permanent staff be required?					X	
19.	If approved, is the current operating budget sufficient to cover the operating costs of the requested project?				X		
20.	If approved, will this request lower the requesting department's operating costs?					X	
21.	Does the request support activities to produce <b>new</b> revenue for the Town?					X	
22.	If the request is not funded will <b>existing</b> Town revenue sources be negatively impacted?					X	
23.	Have other non-capital investment options been explored before submitting this request?				X		
24.	Is specialized training or annual licensing required that the Town will need to pay in order to use the asset (beyond the initial purchase/installation)?					X	
25.	If applicable, will the items being replaced be retained by the Town?					X	
26.	Does this request qualify for funding from Community Preservation Act (CPA)?					X	
27.	Are there any appendix forms with this funding request?					X	

Town of Needham  
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Department Capital Request CIP-DCR										
Title	Filter Media Replacement				Department	Public Works – Water			Fiscal Year	2015
Useful Life	III	Primary Reason			3	Operating Budget Impact			C	
Requested Funding Years & Amounts	Column A		Costs Components	Column B		*Other Expenses		Column C		
Year 1	238,050		Intangibles			Enter description				
Year 2			Equipment			Enter description				
Year 3			Design & Engineering			Enter description				
Year 4			Construction Expenses	238,050		Enter description				
Year 5			Other Expenses*			Enter description				
Column A Total	\$238,050		Column B Total	\$238,050		Column C Total				
Equipment Schedule										
		Yes	<input type="checkbox"/>	No	<input type="checkbox"/>	NA	<input type="checkbox"/>	X	<input type="checkbox"/>	
Description and Justification										
<p>The filter media greensand is used for manganese removal at the Charles River Water Treatment Facility. Greensand must be replaced frequently and requires additional potassium inputs. A new product, Greensand Plus, is a synthetic alternative to natural greensand that can withstand wider variations in operating conditions and has an extended life. Further, Greensand Plus does not require additional potassium inputs. The Town completed the first of four conversions to Greensand Plus in FY13. The second conversion was approved for FY14. The greensand lasts for approximately 15 years so the next scheduled replacement will be around FY 2028.</p> <p>It was discovered at the time of installation that there were additional costs for repairing the exposed screen that had not been originally factored in to this request.</p> <p>The Water Division is requesting to combine the funding requests for the two remaining filters because of the time required to stage each filter media replacement. Replacing the media in two of the filters simultaneously will save money in set up time and purchases of potassium additives.</p> <p>FY 14 Original Estimate was \$75,000  FY 14 Revised Estimate &amp; Appropriation \$115,000 based on actual bid results  FY 15 Estimated Cost per Filter Replacement \$119,025</p>										
FY2015-FY2018 Version										

Town of Needham  
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January 2014

Department Capital Request CIP-DCR								
Title	Fire Flow Improvements	Department	Public Works – Water	Fiscal Year	2017			
Parameters						YES	NO	NA
1.	Is this a multi-year capital replacement/upgrade request?					X		
2.	Is this a request in response to a documented public health or safety condition?						X	
3.	Is this a request in response to a Court, Federal, or State order?						X	
4.	Is this a request for a study or long range plan?						X	
5.	Is this a request to purchase office or school equipment (other than technology)?						X	
6.	Is this a request to purchase specialty equipment?						X	
7.	Is this a request to purchase technology or wireless communication system?						X	
8.	Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?						X	
9.	Is this a request to improve or make repair to extend the useful life of a public building?						X	
10.	Is this a request to improve or replace public infrastructure: bridges, culverts, drainage, intersection, roads, sidewalks, sewers or water systems?					X		
11.	Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?						X	
12.	Will any other department be required to provide resources (other than fulfilling its responsibilities) at any point during the process in order to complete the project?						X	
13.	Are there recommendations or costs identified by other departments that are NOT factored into the request?						X	
14.	Are there additional costs to purchase, install, implement, and/or use (except future year operating costs) that are NOT included in this request?						X	
15.	Are there additional costs to bid, design, construct, complete, and/or use (except future year operating costs) that are NOT included in this request?						X	
16.	If approved, will this request increase the operating expense for any other department?						X	
17.	If approved, will this request require the need for ongoing assistance from vendors at an additional expense to the Town which is not already budgeted?						X	
18.	If approved, will additional permanent staff be required?						X	
19.	If approved, is the current operating budget sufficient to cover the operating costs of the requested project?					X		
20.	If approved, will this request lower the requesting department's operating costs?						X	
21.	Does the request support activities to produce <b>new</b> revenue for the Town?						X	
22.	If the request is not funded will <b>existing</b> Town revenue sources be negatively impacted?						X	
23.	Have other non-capital investment options been explored before submitting this request?						X	
24.	Is specialized training or annual licensing required that the Town will need to pay in order to use the asset (beyond the initial purchase/installation)?						X	
25.	If applicable, will the items being replaced be retained by the Town?						X	
26.	Does this request qualify for funding from Community Preservation Act (CPA)?						X	
27.	Are there any appendix forms with this funding request?						X	
Useful Life	V	Primary Reason	4	Operating Budget Impact		C		

Town of Needham  
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Department Capital Request CIP-DCR							
Title	Fire Flow Improvements		Department	Public Works – Water		Fiscal Year	2017
Requested Funding Years & Amounts	Column A	Costs Components	Column B	*Other Expenses	Column C		
Year 1	107,500	Intangibles		Enter description			
Year 2	504,000	Equipment		Enter description			
Year 3	2,239,000	Design & Engineering	427,575	Enter description			
Year 4	0	Construction Expenses	2,422,925	Enter description			
Year 5	0	Other Expenses*		Enter description			
Column A Total	<b>\$2,850,500</b>	Column B Total	<b>\$2,850, 500</b>	Column C Total			
Equipment Schedule		Yes	<input type="checkbox"/>	No	<input type="checkbox"/>	NA	<input checked="" type="checkbox"/>
Description and Justification							
<p>The Water System Master Plan has identified fire flow adequacy as an improvement for high priority action.</p> <p>A fire flow adequacy analysis was conducted under maximum daily demand that determined the system is unable to meet the minimum 20 pounds per square inch of pressure (psi) in the higher elevations of Town: Tower Hill and Birds Hill Areas. This will address water pressure concerns in high elevation areas during high demand that have been raised by residents in these areas.</p> <p>In order to meet the minimum 20 psi, the DPW is requesting funding for a feasibility study and engineering cost analysis to analyze and propose a cost-effective solution to the low pressure areas. The goal is to create a high pressure zone in those two areas, potentially supplied by water booster stations. The FY17 and FY18 estimates provided are based upon a 1999 water system report and may be altered pending the completion of a feasibility study.</p> <p>FY17- Bird's Hill Tank high service area &amp; Dunster Road Tank high service area / feasibility study - \$ 107,500  FY18 - Bird's Hill Tank high service area &amp; Dunster Road Tank high service area / engineering, design - \$ 504,000  FY19 - Bird's Hill Tank high service area &amp; Dunster Road Tank high service area / construction - \$ 2,239,000</p>							
FY2015-FY2018 Version							

Town of Needham  
Capital Improvement Plan  
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Department Capital Request CIP-DCR							
Title	Water System Rehabilitation Program	Department	Public Works – Water	Fiscal Year	2015		
Parameters					YES	NO	NA
1.	Is this a multi-year capital replacement/upgrade request?			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	Is this a request in response to a documented public health or safety condition?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	Is this a request in response to a Court, Federal, or State order?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	Is this a request for a study or long range plan?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	Is this a request to purchase office or school equipment (other than technology)?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	Is this a request to purchase specialty equipment?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.	Is this a request to purchase technology or wireless communication system?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.	Is this a request to purchase apparatus/equipment that is intended to be permanently installed at the location of its use?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.	Is this a request to improve or make repair to extend the useful life of a public building?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.	Is this a request to improve or replace public infrastructure: bridges, culverts, drainage, intersection, roads, sidewalks, sewers or water systems?			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.	Is this a request to repair or otherwise improve public property which is NOT a building or infrastructure?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.	Will any other department be required to provide resources (other than fulfilling its responsibilities) at any point during the process in order to complete the project?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13.	Are there recommendations or costs identified by other departments that are NOT factored into the request?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.	Are there additional costs to purchase, install, implement, and/or use (except future year operating costs) that are NOT included in this request?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.	Are there additional costs to bid, design, construct, complete, and/or use (except future year operating costs) that are NOT included in this request?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.	If approved, will this request increase the operating expense for any other department?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17.	If approved, will this request require the need for ongoing assistance from vendors at an additional expense to the Town which is not already budgeted?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18.	If approved, will additional permanent staff be required?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19.	If approved, is the current operating budget sufficient to cover the operating costs of the requested project?			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20.	If approved, will this request lower the requesting department's operating costs?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21.	Does the request support activities to produce <b>new</b> revenue for the Town?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22.	If the request is not funded will <b>existing</b> Town revenue sources be negatively impacted?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23.	Have other non-capital investment options been explored before submitting this request?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24.	Is specialized training or annual licensing required that the Town will need to pay in order to use the asset (beyond the initial purchase/installation)?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25.	If applicable, will the items being replaced be retained by the Town?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26.	Does this request qualify for funding from Community Preservation Act (CPA)?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27.	Are there any appendix forms with this funding request?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Useful Life	V	Primary Reason	3, 5	Operating Budget Impact	C		

Town of Needham  
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Department Capital Request CIP-DCR																																													
Title	Water System Rehabilitation Program		Department	Public Works – Water		Fiscal Year																																							
Requested Funding Years & Amounts	Column A	Costs Components	Column B	*Other Expenses	Column C																																								
Year 1	91,000	Intangibles		Enter description																																									
Year 2	820,500	Equipment		Enter description																																									
Year 3	40,000	Design & Engineering	167,500	Enter description																																									
Year 4	399,750	Construction Expenses	1,220,250	Enter description																																									
Year 5	36,500	Other Expenses*		Enter description																																									
Column A Total	<b>\$1,387,750</b>	Column B Total	<b>\$1,387,750</b>	Column C Total																																									
Equipment Schedule																																													
	Yes	No	NA	X																																									
Description and Justification																																													
<p>Under the Water System Rehabilitation Program, the Town’s water infrastructure is continually analyzed to assess functionality and performance, and to identify areas in need of repair. Water infrastructure requires ongoing attention and periodic replacement, and portions of the Town’s water infrastructure are 75+ years old and approaching the end their useful life. A diligent rehabilitation program encompassing maintenance, repair, and replacement ensures a continual supply of water to the public. The Department of Public Works prioritizes replacement of water pipes based upon pipe condition, water break history, and adequacy of water flow to fire hydrants.</p> <p><b>Previously Funded Projects - Completed</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%;">2007</td> <td style="width: 85%;">Charles River St 14” Water Main Cleaning &amp; Relining</td> <td style="width: 10%; text-align: right;">\$348,509</td> </tr> <tr> <td>2008</td> <td>Construction Engineering Services Dunster Water Tank</td> <td style="text-align: right;">\$46,000</td> </tr> <tr> <td>2008</td> <td>Construction/Inspection/Engineering Services Phase I 14” Water Main Cleaning &amp; Relining Charles River St</td> <td style="text-align: right;">\$77,600</td> </tr> <tr> <td>2009</td> <td>Chapel St &amp; May St Engineering Design</td> <td style="text-align: right;">\$93,500</td> </tr> <tr> <td>2009</td> <td>16” Water Main/Remove &amp; Replace on Charles River St (Grove to Marked Tree)</td> <td style="text-align: right;">\$807,661</td> </tr> <tr> <td>2009</td> <td>Pickering St. 8” Water Main Replacement/Engineering &amp; Design</td> <td style="text-align: right;">\$69,300</td> </tr> <tr> <td>2009</td> <td>16” Water Main Construction Engineer Services DWRP #3157</td> <td style="text-align: right;">\$150,940</td> </tr> <tr> <td>2009</td> <td>Chapel/May Water Main Replacement</td> <td style="text-align: right;">\$690,860</td> </tr> <tr> <td>2010</td> <td>Pickering St &amp; Garden Street St Water Main Construction</td> <td style="text-align: right;">\$521,338</td> </tr> <tr> <td>2012</td> <td>Highland Ave Water Main Replacement Webster to Sachum Rd Design</td> <td style="text-align: right;">\$29,300</td> </tr> <tr> <td>2012</td> <td>Highland Ave Water Main Replacement, Webster to Muzi Ford, Const.</td> <td style="text-align: right;">\$519,628</td> </tr> <tr> <td>2012</td> <td>Lincoln St Water Main Replacement Design</td> <td style="text-align: right;">\$23,125</td> </tr> <tr> <td>2012</td> <td>16” Water Main Replacement Design (Chestnut &amp; Oak)</td> <td style="text-align: right;">\$29,300</td> </tr> </table>							2007	Charles River St 14” Water Main Cleaning & Relining	\$348,509	2008	Construction Engineering Services Dunster Water Tank	\$46,000	2008	Construction/Inspection/Engineering Services Phase I 14” Water Main Cleaning & Relining Charles River St	\$77,600	2009	Chapel St & May St Engineering Design	\$93,500	2009	16” Water Main/Remove & Replace on Charles River St (Grove to Marked Tree)	\$807,661	2009	Pickering St. 8” Water Main Replacement/Engineering & Design	\$69,300	2009	16” Water Main Construction Engineer Services DWRP #3157	\$150,940	2009	Chapel/May Water Main Replacement	\$690,860	2010	Pickering St & Garden Street St Water Main Construction	\$521,338	2012	Highland Ave Water Main Replacement Webster to Sachum Rd Design	\$29,300	2012	Highland Ave Water Main Replacement, Webster to Muzi Ford, Const.	\$519,628	2012	Lincoln St Water Main Replacement Design	\$23,125	2012	16” Water Main Replacement Design (Chestnut & Oak)	\$29,300
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Department Capital Request CIP-DCR					
Title	Water System Rehabilitation Program	Department	Public Works – Water	Fiscal Year	2015
2013	Grant St./Junction St. to Dedham Ave. – New 8’ (2500 lf) – Eng. & Design			\$33,000	
In-Progress	Grant St. – New 8’ (2500 lf) - Construction			\$498,914 (Contract)	
In-Progress	Lincoln St. – Construction			\$382,304 (Contract)	
In-Progress	16” Water Main @ School St, Chestnut St, & Oak St – Eng. & Design			\$11,800 (Contract)	
<b><u>FY15</u></b>					
	Pleasant St./Howland St. to Dedham Ave. – New 8” (1160 lf) – Eng. & Design		\$91,000		
	Norfolk St./Warren St. to Webster St. – New 8” (1300 lf) – Eng. & Design				
<b><u>FY16</u></b>					
	Pleasant St./Howland St. to Dedham Ave. – New 8” (1160 lf) – Construction		\$820,500		
	Norfolk St./Warren St. to Webster St. – New 8” (1300 lf) – Construction				
<b><u>FY17</u></b>					
	Alfreton Rd./ Highland Ave. to Webster St. New 8” (500 lf) - Eng. & Design		\$40,000		
	Bennington St. / High St. to Concord St. New 8” (650 lf) - Eng. & Design				
<b><u>FY18</u></b>					
	Alfreton Rd./Highland Ave to Webster – Construction		\$399,750		
	Bennington St./High St. to Concord St. – Construction				
<b><u>FY19</u></b>					
	Thorpe Rd./Webster St. to End New 8” (330lf) – Eng. & Design		\$36,500		
	Mills Rd./ Sachem Rd. to Davenport Ave. New 8” (500lf) – Eng. & Design				
	Mayo Ave. Harris Ave to Great Plain Ave New 8” (1060lf) – Eng. & Design				
<u>Future Projects after FY19:</u>					
<b><u>FY20</u></b>					
	Thorpe Rd./ Mills Rd./ Mayo Ave. – Construction		\$375,000		
	Mills Rd./ Sachem Rd. to Davenport Ave. New 8” (500lf) – Construction				
	Mayo Ave. Harris Ave to Great Plain Ave New 8” (1060lf) – Construction				

Town of Needham  
Capital Improvement Plan  
January 2014

Department Capital Request CIP-DCR					
Title	Water System Rehabilitation Program	Department	Public Works – Water	Fiscal Year	2015
<u>FY21</u> Kingsbury St. / Oakland Ave. to Webster St. 8" (1,500lf) – Eng. & Design \$43,000 Oakland Ave. / May St. to Highland Ave. 8" (1,1,00lf)- Eng. & Design					
<u>FY22</u> Kingsbury St. / Oakland Ave. to Webster St. 8" (1,500lf) – Construction \$443,500 Oakland Ave. / May St. to Highland Ave. 8" (1,1,00lf) - Construction					
Fenton Rd. / West St. to Pershing Rd. - Eng. & Design Greenough St. / Pine Grove St. to Avery St. – Eng. & Design Pine Grove St. Hillside Ave to existing 8" - Eng. & Design High St./Webster St to Greendale Ave 1,400' of 8" – Eng. & Design Tower Ave./Greendale Ave to Lexington Ave. 800' of 12" – Eng. & Design					
FY2015-FY2018 Version					