TOWN OF BARNSTABLE MASSACHUSETTS





FY 2018 CAPITAL BUDGET AND FY 2018 – FY 2022 CAPITAL IMPROVEMENTS PLAN



The Government Finance Officers Association of the United States and Canada (GFOA) has presented a Distinguished Budget Award to the Town of Barnstable for the fiscal year beginning July 1, 2016. The award is the highest form of recognition in governmental budgeting. In order to receive this award, a government unit must publish a budget document that meets program criteria as a policy document, as an operations guide, as a financial plan, and as a communications device. This is the **sixteenth consecutive year** that the Town of Barnstable has been presented with this prestigious award.

The criterion on which the award for fiscal year 2017 was based is that which has been used as a guide in preparing the budget for fiscal year 2018. Therefore, it is my belief that the Capital and Operating budgets presented for fiscal year 2018 conform to program requirements, and I will submit them to GFOA to determine their eligibility for another award. My Staff, Mark Milne, Finance Director, and Robert O'Brien, Budget Director, are to be congratulated for their parts in this and the previous fifteen awards.

Mark S. Ells Town Manager

Front Cover Photo: Pipe Replacement - Waste Water Treatment Plant Back Cover Photo: Maple Street & Walnut Street - Drainage



The Town of Barnstable Office of Town Manager

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Mark S. Ells, Town Manager mark.ells@town.barnstable.ma.us

TO:	The Honorable Members of the Town Council
FROM:	Mark S. Ells, Town Manager
RE:	FY 2018 Capital Budget and FY 2018 – FY 2022 Capital Improvements Plan
DATE:	March 15, 2017

The governing regulations for the Town of Barnstable's Capital Improvements Program are encompassed in Section 6-5 of the Town Charter and state the following:

- a) Preparation. The Town Manager shall, in conjunction with any committee established for such purpose, annually submit a capital improvements program to the Town Council at least thirty days prior to the date for submission of the operating budget; unless some other time is provided by ordinance.
- b) Contents. The capital improvements plan shall include: (1) a clear summary of its contents; (2) an itemization of all capital improvements, including those of the school department, proposed to be undertaken during the next five fiscal years with supporting data; (3) cost estimates, methods of financing, and recommended time schedules: and (4) the estimated annual cost of the operating and maintaining the facilities included.
- c) Public Hearing. The Town Council shall publish in a newspaper of general circulation in the Town a summary of the capital improvements plan and a notice stating: (1) the times and places where entire copies of the capital improvements plan are available for inspection by the public; and (2) the date, time, and place not less than fourteen days after such publication, when a public hearing on said plan will be held by the Town Council.
- d) Adoption. At any time after the public hearing but before the first day of the last month of the current fiscal year, the Town Council shall by resolution adopt the capital improvements plan with or without amendment, provided that each amendment must be voted separately and then any increase in the capital improvements plan, as submitted, must clearly identify the method of financing proposed to accomplish this increase.

In accordance with the Town Charter, I hereby submit the Town's FY 2018 Capital Budget and FY 2018 – FY 2022 Capital Improvements Plan for your review and action. In forwarding this document, I would be remiss in not mentioning the work that went into its development by my department heads, their staff and, in particular, the members of the Comprehensive Finance Advisory Committee who spent many hours reviewing and commenting on the numerous projects submitted.

ELECTED OFFICIALS

BARNSTABLE TOWN COUNCIL

Eric R. Steinhilber, Council President, Precinct 2 Term 2017 James H. Crocker, Jr., Council Vice President, Precinct 5 Term 2019 Jessica Rapp Grassetti, , Precinct 7 Term 2019 John G. Flores, Precinct 1 Term 2019 Paul Hebert, Precinct 3 Term 2019 Frederick Chirigotis, Precinct 4 Term 2017 William Crocker, Jr., Precinct 6 Term 2017 Debra S. Dagwan, Precinct 8 Term 2017 James M. Tinsley, Precinct 9 Term 2019 Sara Cushing, Precinct 10 Term 2017 Philip N. Wallace, Precinct 11 Term 2019 John T. Norman, Precinct 12 Term 2017

BARNSTABLE SCHOOL COMMITTEE

Margeaux Weber, Chair Chris Joyce, Vice Chair Stephanie Ellis Mike Judge R. Patrick Murphy

TOWN CLERK

Ann M. Quirk, CMC

TOWN COLLECTOR

Maureen Niemi

<u>Name</u>

Position

TOWN ADMINISTRATION

Mark S. Ells	Town Manager
Vacant	Assistant Town Manager
Roland W. Breault	Barnstable Municipal Airport Manager
Meg Mayo-Brown	Superintendent of Schools
Cynthia A. Lovell	Town Council Administrator
Paul B. MacDonald	Chief of Police
Elizabeth Jenkins	Interim Director of Growth Management Department
Lynne M. Poyant	Director of Community Services Department
Daniel W. Santos	Director of Public Works Department
Richard V. Scali	Director of Regulatory Services Department

OTHER TOWN OFFICIALS

Ruth J. Weil, Esq.	Town Attorney
Mark A. Milne, C.P.A	Director of Finance
Robert L. O'Brien	Budget Director
Debra Blanchette	Treasurer
Jeffery Rudziak	Director of Assessing
William E. Cole	Director of Human Resources
Daniel J. Wood	Director of Information Technology
Gregory Quilty	Veterans Agent

AIRPORT COMMISSION

John T. Griffin, Jr., Chairman
Timothy R. Luzietti , Vice Chairman
Robert L. O'Brien, Clerk
Stephen P. Cobb
Elizabeth Young
James DellaMorte
Mary F. Smith

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PART I – CAPITAL IMPROVEMENTS PLAN SUBMISSIONS

Cost and Fiscal Year Summary

The capital projects identified by the Town departments in this year's CIP process represents a total of \$31,759,245 for FY 2018, and a combined total of \$183,834,788 over a five-year period. Of the \$183 million, approximately \$61.8 million represents enterprise funds and \$121.9 million are general fund requests.

	Enterprise Funds	General Fund	Total
FY 2018	\$9,669,033	\$22,090,212	\$31,759,245
FY 2019	\$22,134,524	\$28,424,121	\$50,558,645
FY 2020	\$10,277,700	\$26,747,525	\$37,025,225
FY 2021	\$13,150,000	\$19,360,881	\$32,510,881
FY 2022	\$6,608,000	\$25,372,792	\$31,980,792
Totals	\$61,839,257	\$121,995,531	\$183,834,788

Enterprise Fund projects are distributed by fund as follows:

Fund	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Totals
Airport	\$2,240,000	\$5,650,000	\$7,916,700	\$4,750,000	\$2,350,000	\$22,906,700
Golf	\$4,502,193	\$437,774	\$675,000	\$1,150,000	\$1,500,000	\$8,264,967
Water Pollution	\$382,000	\$5,155,000	\$400,000	\$4,000,000	\$1,470,000	\$11,407,000
Water Supply	\$2,168,840	\$5,844,500	\$1,286,000	\$3,250,000	\$1,288,000	\$13,837,340
Sandy Neck	\$376,000	-	-	-	-	\$376,000
Marina	-	\$5,047,250	-	-	-	\$5,047,250
Totals	\$9,669,033	\$22,134,524	\$10,277,700	\$13,150,000	\$6,608,000	\$61,839,257

General Fund projects are distributed as follows:

Department	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Totals
Police Dept.	\$158,226	-	\$846,600	-	-	\$1,004,826
Admin. Services	\$706,969	-	-	-	-	\$706,969
Comm. Services	\$4,508,704	\$6,989,401	\$9,824,088	\$692,620	\$539,432	\$22,554,245
Public Works	\$8,303,870	\$16,606,720	\$12,883,837	\$13,625,261	\$20,040,360	\$71,460,048
Reg. Services	\$82,443	\$93,000	\$93,000	\$93,000	\$93,000	\$454,443
Schools	\$8,330,000	\$4,635,000	\$3,000,000	\$4,850,000	\$4,600,000	\$25,815,000
Totals	\$22,090,212	\$28,324,121	\$26,647,525	\$19,260,881	\$25,272,792	\$121,995,531

Detail Project Listing

The description and justification for each project listed on the following tables are included in Part IV and Part VII of this document. Part IV contains projects recommended for funding in the FY 2018 program while Part VII includes those projects that will be addressed in the subsequent years. In addition to the projects listed on these tables, several others that have been identified for which the scope and cost estimates are a work in progress include the following:

Three Bays Watershed 208 Plan Implementation Project

Three Bays Preservation, Inc. has submitted a proposal to the United States Environmental Protection Agency (EPA) in response to the 2016 Southeast New England Program for Coastal Watershed Restoration Grants. The EPA received 50 eligible initial proposals and is inviting 24 to submit a full proposal. Three Bays is one of the 24 invitees. The Town has an existing \$250,000 appropriation for the dredging of Mill Pond which has not been pursued due to permitting complications. These funds are being held in abeyance to be used as a local match for Three Bays grant application subject to the Town Council's approval. It is not yet known if more local funds will be required in order to secure any potential grant award.

Armory and Former Marstons Mills Elementary School

These facilities may require some capital investment by the Town in order to make them usable or to attract a viable tenant or project. The Armory building is currently being used to store the records, supplies and equipment of several town departments. An RFP was issued for this site with one proposal received which is currently under evaluation.

Water Quality

The Cape Cod Commission was directed by the Commonwealth of Massachusetts to prepare an update to the 1978 Section 208 Area-Wide Water Quality Management Plan for Cape Cod. Ultimately, implementing this plan will have significant financial impacts to communities across Cape Cod. Detailed plans and cost estimates have not yet been developed but this will ultimately be the single largest capital program the Town has ever seen. The Town Council has formed the Water Resource Advisory Committee to address this program and the Department of Public Works is updating its Comprehensive Water Resources Management Plan.

Recreational Fields and High School Athletic Field Upgrades

A comprehensive analysis will be conducted on the Town's recreational fields. It is anticipated that future appropriations will be coming forward for the improvement to these properties. In addition, a preliminary investigation is underway for the re-development of the fields at Barnstable High School.

Private Roads

Many of the Town's privately owned roads are approaching the end of their useful life. The owners can avail themselves of the Town's Temporary Repairs to Private Roads Program whereby the Town will use its administrative capabilities, buying power and borrowing abilities to make the repairs and assess the property abutters a betterment for which they have the option to apportion over future tax bills. Some of the private roads may be eligible for Town funding if the town Council declares them to be public use roads due to the nature of their use. The cost of such declaration is unknown at this time but could be in the millions.

Project Submissions for Enterprise Funds

Depart	mont				ive Year Costs			Project Totals
Priority	Name	Project Description	2018	2019	2020	2021	2022	2018-2022
1	BMA	Obstruction Mitigation Plan and Airspace Analysis	345,000	_	-	_	_	345,000
2	BMA	Comprehensive FAA Airport Layout Plan/FAA Master Plan Update	700,000	-	-	-	-	700,000
3	BMA	Airport Access Control and Security Improvements	745,000	-	-	-	-	745,000
4	BMA	Clear Vegetation and Obstruction Removal - Airport Perimeter	300,000	-	-	-	-	300,000
5	BMA	Runway and Taxiway Markings and Airport-Owned Roadways Annual Painting Contract	150,000	150,000	150,000	150,000	150,000	750,000
6	BMA	Runway 24 Departure End Safety Area	-	4,300,000	-	-	-	4,300,000
7	BMA	Design and Construct Snow Removal Equipment (SRE) Vehicle Storage Building	-	400,000	-	-	-	400,000
8	BMA	Design and Replace Mo-Gas and Diesel Fuel Con Vault, Gas Boy & Alarm	-	150,000	-	-	-	150,000
9	BMA	Design and Construct New T-Hangar	-	650,000	-	-	-	650,000
10	BMA	Reconstruct Runway 6-24	-	-	7,000,000	-	-	7,000,000
11	BMA	Replace Airport Perimeter Fence	-	-	666,700	-	-	666,700
12	BMA	Replace Aircraft Rescue and Fire Fighting Equipment (ASV Skid Steer Plow & Firefight Truck)	-	-	100,000	800,000	-	900,000
13	BMA	Design, Realign, and Reconstruct Taxiway Delta & Echo at Runway 15-33 Intersection	-	-	-	3,000,000	-	3,000,000
14	BMA	Environmental Assessment for FAA Master Plan Projects and Phased Permitting	-	-	-	800,000	400,000	1,200,000
15	BMA	Design and Reconstruct a Portion of Taxiway Bravo (B)	-	-	-	-	1,800,000	1,800,000
	•	TOTAL AIRPORT	2,240,000	5,650,000	7,916,700	4,750,000	2,350,000	22,906,700
1	CSD	Hvannis Golf Course Restoration	4.177.193	_		-	-	4,177,193
2	CSD	Hyannis Golf Course Turf Maintenance and Equipment Replacement	325,000		-	_		325,000
3	CSD	Olde Barnstable Fairgrounds Golf Club Facility Improvements	-	257,774	175,000	750,000	1,500,000	2,682,77
4	CSD	Hyannis Golf Course Facility Improvements and Fixtures Replacement	_	180,000	500,000	400,000	_,500,000	1,080,000
-		TOTAL COMMUNITY SERVICES GOLF	4,502,193	437,774	675,000	1,150,000	1,500,000	8,264,967
1	CSD	Beach Park Coastline Stabilization	376,000	-	-	-	-	376,000
		TOTAL COMMUNITY SERVICES SANDY NECK	376,000	-	-	-	-	376,000
1	CSD	Bismore Park Bulkhead Improvement Design	-	5,047,250	-	-	-	5,047,25
		TOTAL COMMUNITY SERVICES MARINAS	-	5,047,250	-	-	-	5,047,250

Project Submissions for the Enterprise Funds - Continued

2022 - - - - - - - - - - - - - -	Totals 2018-2022 200,000 55,000 927,000 800,000 3,500,000 4,400,000
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470,000	470,000
L,470,000	11,407,000
-	490,840
-	295,000
L,050,000	4,700,000
200,000	1,000,000
-	638,000
-	45,000
-	940,000
38,000	4,629,500
-	1,099,000
L,288,000	13,837,340
5,608,000	61,839,257
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Project Submissions for the General Fund

Depart	tment			Fiv	ve Year Costs			Totals
Priority	Name	Project Description	2018	2019	2020	2021	2022	2018-2022
1	POL	Barnstable Police Department Window Replacement	-	-	846,600	-	-	846,60
2	POL	Barnstable Police Department Dispatch Center Renovations	158,226	-	-	-	-	158,22
		TOTAL POLICE DEPARTMENT	158,226	-	846,600	-	-	1,004,82
					,	,	,	
1	ASD	Finance Department-Tyler Content Manager	105,300	-	-	-	-	105,30
2	ASD	Unified Communications - VOIP (Voice Over Internet Protocol)	601,669	-	-	-	-	601,66
		TOTAL ADMINISTRATIVE SERVICES DEPARTMENT	706,969	-	-	-	-	706,96
						,	,	
1	RSD	Hydrilla Control - Mystic Lake, Middle Pond, and Long Pond (Centerville)	82,443	93,000	93,000	93,000	93,000	454,44
		TOTAL REGULATORY SERVICES DEPARTMENT	82,443	93,000	93,000	93,000	93,000	454,44
1	CSD	Barnstable Senior Center Stand-by Generator	249,143	-	-	-	-	249,14
2	CSD	Craigville Bathhouse Site Work	246,800	-	-	-	-	246,8
3	CSD	Bathhouse Septic Upgrades Program	187,220	-	-	-	-	187,22
4	CSD	Osterville Recreation Building Design & Construction	1,108,823	-	8,042,269	-	-	9,151,09
5	CSD	Kennedy Memorial Renovation Construction	974,200	-	-	-	-	974,20
6	CSD	West Bay Channel Dredging Design & Permitting	-	101,200	-	-	-	101,20
7	CSD	Blish Point Design for Long Term Solutions	-	196,500	1,600,000	-	-	1,796,50
8	CSD	MEA Interior Project Phase III	192,106	-	-	-	-	192,10
9	CSD	Centerville Recreation Interior Improvements	292,432	150,000	75,000	25,000	539,432	1,081,80
10	CSD	Beach Parking Lot Rehabilitation- Covell's Beach	432,500	-	-	-	-	432,50
11	CSD	West Bay Breakwater-Permitting and Construction	-	5,047,250	-	-	-	5,047,2
12	CSD	Mill Pond & Long Pond Fish Ways - Construction	-	377,500	-	-	-	377,50
13	CSD	Hyannis Breakwater Study Preliminary Design & Future Construction	167,000	TBD	TBD	-	-	167,00
14	CSD	Centerville Recreation Building Site Design & Construction	176,147	895,951	-	-	-	1,072,0
15	CSD	Scudder's Lane Boat Ramp Design & Construction	255,500	-	-	-	-	255,50
16	CSD	Millway Beach ADA Access	-	221,000	-	-	-	221,00
17	CSD	MEA Bldg Site Work Improvements Phase IV	226,833	-	-	-	-	226,83
18	CSD	MEA Storage Building Phase V	-	-	106,819	667,620	-	774,43
		TOTAL COMMUNITY SERVICES DEPARTMENT	4,508,704	6,989,401	9,824,088	692,620	539,432	22,554,2

Project Submissions for the General Fund – Continued

Departi	ment				ive Year Costs			Totals
Priority	Name	Project Description	2018	2019	2020	2021	2022	2018-2022
1	DPW	Public Roads Maintenance	3,250,000	3,825,000	3,901,500	3,980,000	4,059,600	19,016,100
2	DPW	Sidewalk Overlay and Guardrail	314,000	330,000	346,000	364,000	382,000	1,736,000
3	DPW	Town Hall Restroom Renovations	610,000	-	-	-	-	610,000
4	DPW	Sidewalks on Pitchers Way (Bearse's Way to Route 28) Design & Construction	595,000	-	-	-	-	595,000
5	DPW	Cotuit Enhanced ADA Compliant Pedestrian Crossing	110,500	-	-	-	-	110,500
6	DPW	Town Hall & School Administration Building Masonry Sealer	116,250	-	-	-	-	116,250
7	DPW	Private Road Repair	750,000	750,000	750,000	-	-	2,250,000
8	DPW	Town Hall Complex Improvements-Parking Lot	125,000	827,000	-	-	-	952,000
9	DPW	Town Hall Security Improvements	480,000	250,000	TBD	-	-	730,000
10	DPW	Hyannis Main Street West End Rotary Study, Design & Construction	230,000	2,400,000	-	-	-	2,630,000
11	DPW	Parking Lot Maintenance	500,000	500,000	500,000	500,000	500,000	2,500,000
12	DPW	ADA Compliance Pedestrian Crossing & Sidewalks Report, Design & Construction	155,000	155,000	155,000	-	-	465,000
13	DPW	West Barnstable Shooting Range	450,000	350,000	1,200,000	-	-	2,000,000
14	DPW	JFK Museum Plaza Replacement	234,550	-	-	-	-	234,550
15	DPW	Mosswood Cemetery Building Improvements	147,570	-	-	-	-	147,570
16	DPW	DPW Offices Phase III Construction	103,500	-	849,055	-	-	952,555
17	DPW	Huckin's Neck Road Reconstruction	-	3,567,500	-	-	-	3,567,500
18	DPW	Snows Creek Culvert- Construction	-	1,430,000	-	-	-	1,430,000
19	DPW	Town Hall Interior Renovations	-	562,000	256,000	-	-	818,000
20	DPW	U.S Custom House Interior Work	-	364,370	-	-	-	364,370
21	DPW	Bumps River Bridge Construction	-	325,500	-	-	-	325,500
22	DPW	Cape Cod Airfield Hangar Repair	-	311,350	-	-	-	311,350
23	DPW	Kennedy Legacy Trail Sidewalk Improvements Design & Construction	-	240,000	-	-	-	240,000
24	DPW	Traffic Signal Upgrades Study, Design & Construction	-	150,000	100,000	100,000	-	350,000
25	DPW	MS4 Municipal Separate Storm Sewer System Program	-	150,000	-	-	-	150,000
26	DPW	West Barnstable Railroad Depot Restoration	-	89,000	292,000	-	-	381,000
27	DPW	Bearse's Way Bike Path Construction	-	30,000	-	835,000	-	865,000
28	DPW	School Administration Building Mechanical Upgrades	-	-	253,474	2,006,000	-	2,259,474
29	DPW	Highway Truck Storage Facilities Design & Construction	-	-	-	-	7,115,000	7,115,000
30	DPW	Bay Shore Road Boat Ramp Design & Construction	-	-	-	-	256,000	256,000
31	DPW	Craigville Beach Road Pump Station and Force Main	-	-	-	577,500	3,623,000	4,200,500
32	DPW	Burgess Barn Interior	-	-	-	-	321,427	321,427
33	DPW	Old Jail Repairs	-	-	-	320,316	-	320,316
34	DPW	U.S. Custom House Carriage House Design & Construction	-	-	46,975	173,212	-	220,187

Project Submissions for the General Fund – Continued

Depart	ment			I	Five Year Costs			Totals
Priority	Name	Project Description	2018	2019	2020	2021	2022	2018-2022
35	DPW	U.S. Custom House Site Improvements	-	-	30,000	186,900	-	216,900
36	DPW	Highway Division/Administrative Services Division Parking Lot Rehabilitation	-	-	-	264,000	-	264,000
37	DPW	Marston Mills Airport Fuel Tank Replacement	132,500	-	-	-	-	132,500
38	DPW	Armory Building Envelope, Electrical, and Mechanical Improvements	-	-	-	-	400,000	400,000
39	DPW	Coastal Resiliency Master Plan Development	-	-	225,000	TBD	TBD	225,000
40	DPW	DPW Salt Storage Facility	-	-	1,875,000	-	-	1,875,000
41	DPW	Cape Cod Rail Trail Extension Shared Use Path Sandwich to Yarmouth- Design	-	-	723,333	723,333	723,333	2,169,999
42	DPW	Barnstable Road Reconstruction Design & Construction	-	-	225,000	-	2,660,000	2,885,000
43	DPW	South Street Improvements Design & Construction	-	-	290,000	3,527,500	-	3,817,500
44	DPW	Sidewalk Installations Bumps River Rd Centerville, Main St Cotuit, South St Hyannis	-	-	798,000	-	-	798,000
45	DPW	Traffic Calming	-	-	67,500	67,500	-	135,000
		TOTAL PUBLIC WORKS DEPARTMENT	8,303,870	16,606,720	12,883,837	13,625,261	20,040,360	71,460,048
1	SCH	Barnstable High School Stadium Bleachers	1,055,000	-	-	-	-	1,055,000
2	SCH	Barnstable High School 21st Century Learning Space Project	3,500,000	-	-	-	-	3,500,000
3	SCH	Barnstable High School Cafeteria Storefront and Window Replacement	225,000	-	-	-	-	225,000
4	SCH	Unit Ventilator Upgrades	250,000	250,000	250,000	-	-	750,000
5	SCH	Network Infrastructure Upgrades	250,000	-	-	-	-	250,000
6	SCH	Hyannis West Walk-In Cooler Replacement	100,000	-	-	-	-	100,000
7	SCH	Barnstable West Barnstable Roof Replacement	200,000	-	-	-	-	200,000
8	SCH	Campus Wide Mechanical Upgrades (Burners, Boilers, HVAC & Pumps)	75,000	250,000	250,000	250,000	-	825,000
9	SCH	Replace HVAC Roof Top Unit (RTU's) at Barnstable High School and Barnstable Middle School	100,000	1,000,000	1,000,000	2,000,000	2,500,000	6,600,000
10	SCH	Upgraded Modular Office Space (BPS Transportation & Food Services)	300,000	-	-	-	-	300,000
11	SCH	Communications and Security Network Upgrades	100,000	-	-	-	-	100,000
12	SCH	West Villages Elementary Emergency Generator Replacement	100,000	-	-	-	-	100,000
13	SCH	Exterior/Interior Door Replacement	100,000	-	-	-	-	100,000
14	SCH	Facilities Maintenance Shop Roof Replacement	75,000	-	-	-	-	75,000
15	SCH	BPS Campus Wide Painting	100,000	100,000	100,000	100,000	-	400,000
16	SCH	BPS Campus Wide Paving	225,000	250,000	300,000	400,000	-	1,175,000
17	SCH	Field House Improvements	250,000	250,000	-	-	-	500,000
18	SCH	Barnstable Public Schools Asbestos Abatement	300,000	-	-	-	-	300,000

Project Submissions for the General Fund - Continued

Depart	ment				Five Year Costs			Totals
Priority	Name	Project Description	2018	2019	2020	2021	2022	2018-2022
1	SCH	Barnstable High School Stadium Bleachers	1,055,000	-	-	-	-	1,055,000
2	SCH	Barnstable High School 21st Century Learning Space Project	3,500,000	-	-	-	-	3,500,000
3	SCH	Barnstable High School Cafeteria Storefront and Window Replacement	225,000	-	-	-	-	225,000
4	SCH	Unit Ventilator Upgrades	250,000	250,000	250,000	-	-	750,000
5	SCH	Network Infrastructure Upgrades	250,000	-	-	-	-	250,000
6	SCH	Hyannis West Walk-In Cooler Replacement	100,000	-	-	-	-	100,000
7	SCH	Barnstable West Barnstable Roof Replacement	200,000	-	-	-	-	200,000
8	SCH	Campus Wide Mechanical Upgrades (Burners, Boilers, HVAC & Pumps)	75,000	250,000	250,000	250,000	-	825,000
9	SCH	Replace HVAC Roof Top Unit (RTU's) at Barnstable High School and Barnstable Middle School	100,000	1,000,000	1,000,000	2,000,000	2,500,000	6,600,000
10	SCH	Upgraded Modular Office Space (BPS Transportation & Food Services)	300,000	-	-	-	-	300,000
11	SCH	Communications and Security Network Upgrades	100,000	-	-	-	-	100,000
12	SCH	West Villages Elementary Emergency Generator Replacement	100,000	-	-	-	-	100,000
13	SCH	Exterior/Interior Door Replacement	100,000	-	-	-	-	100,000
14	SCH	Facilities Maintenance Shop Roof Replacement	75,000	-	-	-	-	75,000
15	SCH	BPS Campus Wide Painting	100,000	100,000	100,000	100,000	-	400,000
16	SCH	BPS Campus Wide Paving	225,000	250,000	300,000	400,000	-	1,175,000
17	SCH	Field House Improvements	250,000	250,000	-	-	-	500,000
18	SCH	Barnstable Public Schools Asbestos Abatement	300,000	-	-	-	-	300,000
19	SCH	Barnstable United Courtyard Improvements	100,000	-	-	-	-	100,000
20	SCH	Centerville Elementary School Elevator Project	250,000	-	-	-	-	250,000
21	SCH	Electric Utility Transformer Upgrade	300,000	-	-	-	-	300,000
22	SCH	District Masonry Personnel	100,000	100,000	100,000	100,000	100,000	500,000
23	SCH	Flooring Replacement and Upgrades	100,000	100,000	100,000	100,000	100,000	500,000
24	SCH	Centerville Elementary School Window Replacement	100,000	1,000,000	-	-	-	1,100,000
25	SCH	Field / Ground Improvements	-	1,000,000	1,000,000	1,000,000	2,000,000	5,000,000
26	SCH	Synthetic Turf Replacement	-	-	-	1,000,000	-	1,000,000
27	SCH	Hyannis West Elementary Roof Replacement	-	290,000	-	-	-	290,000
28	SCH	Centerville Elementary Roof Replacement	-	145,000	-	-	-	145,000
29	SCH	Bubbler and Water Cooler Replacement	75,000	-	-	-	-	75,000
		TOTAL SCHOOL DEPARTMENT	8,330,000	4,635,000	3,000,000	4,850,000	4,600,000	25,815,000
		TOTAL GENERAL FUND	22,090,212	28,324,121	26,647,525	19,260,881	25,272,792	121,995,53
						• 	· I	· ·
		TOTAL ENTERPRISE & GENERAL FUND PROJECT COSTS	31,759,245	50,458,645	36,925,225	32,410,881	31,880,792	183,834,788

PART II – STATUS OF EXISTING CAPITAL APPROPRIATIONS

Updated Fiscal Year 2017 Capital Program

After the completion of the public hearings on the fiscal year 2017 Capital Improvement Program several supplemental appropriations were brought forward for various reasons. The original and revised fiscal year 2017 capital programs are summarized as follows:

	General Fund	Community Preservation Fund	Sewer Construction Private Way Fund	Enterprise Funds	Total
Original Capital Program	<u>\$13,822,449</u>	<u>\$923,000</u>	<u>\$853,000</u>	<u>\$14,283,505</u>	<u>\$29,881,954</u>
Supplemental Appropriations:					
Airport Runway				\$645,090	\$645,090
Water Filtration System				\$540,000	\$540,000
Private Way Improvements	\$180,000				\$180,000
Water System Building				<u>\$1,113,000</u>	<u>\$1,113,000</u>
Subtotal	<u>\$180,000</u>			<u>\$2,298,090</u>	<u>\$2,478,090</u>
Revised FY17 Capital Program	<u>\$14,002,449</u>	<u>\$923,000</u>	<u>\$853,000</u>	<u>\$16,581,595</u>	<u>\$32,360,044</u>

2018 CIP - Status of Existing General Fund Capital Appropriations

Balances in Completed Projects Used to Fund the FY 2018 Capital Program

Part of the annual Capital Improvements Program process is to review the status of all projects, which were appropriated in previous fiscal years. If a project has been completed and funds remain in the appropriation, the remaining funds will be used as a funding source for the current year's capital program. A total of \$643,914 has been identified in prior appropriations and will be applied as follows:

	Available	
Original Appropriation Order	Amount	Project Allocation
2013-115 Roadway Projects	\$120,000	JFK Museum Plaza Replacement
		JFK Museum Plaza Replacement &
2014-101 Bicycle Accommodations	\$170,000	Senior Center Generator
2013-105 Modular Classroom Removal	\$4,798	21 st Century Learning Center at BHS
2013-106 School Facility Improvements	\$9,964	21 st Century Learning Center at BHS
2014-092 Early Learning Center	\$2,197	21st Century Learning Center at BHS
2014-093 Intermediate School improvements	\$9,826	21st Century Learning Center at BHS
2014-096 School AC & Chiller Pipes	\$22,471	21st Century Learning Center at BHS
2015-045 School Improvements	\$13,685	21st Century Learning Center at BHS
2015-115 Modular Classrooms	\$13,499	21st Century Learning Center at BHS
2015-116 BIS Façade & Roof Improvements	\$172,715	21st Century Learning Center at BHS
2015-119 Boiler Replacements	\$54,759	21st Century Learning Center at BHS
2015-121 BIS Cogeneration Plant	\$50,000	21st Century Learning Center at BHS
Total	\$643,914	

The lists on the following pages comprise the active capital projects after the remaining funds from completed projects have been identified. Some of these projects are near completion and some have yet to be implemented.

Review of Active Prior Year Capital Appropriations

GENERAL FUND:

						Balance		
Council						Available		
Order	Dept.	Project Title	Appropriation	Expended	Encumbered	1/31/2017	Project Status	Appropriation Status
2002-081	DPW	FY03 NITROGEN MANAGEMENT	1,700,000.00	1,434,459.54	265,506.07	34.39	Implementation Underway	Expires when encumbrance is paid or liquidated
2010-111	DPW	FY11 WEST BAY BRIDGE REPAIRS	650,000.00	455,496.61	102,085.22	92,418.17	Construction	Expires when encumbrance is paid or liquidated
2010-113	DPW	FY11 COMPREHENSIVE WASTEWATER MGT.	600,000.00	93,848.34	28,880.00	477,271.66	Implementation Underway	Expires when encumbrance is paid or liquidated
2012-097	DPW	FY13 SIDEWALKS PROGRAM	70,000.00	65,098.60	4,117.62	783.78	Construction	Expires when encumbrance is paid or liquidated
2012-097	DPW	FY13 SNOWS CREEK CULVERT	75,000.00	57,407.40	12,782.80	4,809.80	Construction	Expires when encumbrance is paid or liquidated
2012-097	DPW	FY13 BUMPS RIVER BRIDGE	29,000.00	15,252.92	13,747.08	0.00	Design	Expires when encumbrance is paid or liquidated
2012-097	DPW	FY13 WEST BAY BREAKWATER	75,000.00	46,232.94	28,650.00	117.06	Construction	Expires when encumbrance is paid or liquidated
2013-105	SCH	MODULAR CLASSROOMS-REMOV	125,000.00	116,301.90	3,900.00	4,798.10	Completed	Will use balance for FY18 CIP
2013-106	SCH	BLEACHER UPDGRADES	55,000.00	45,036.00	0.00	9,964.00	Completed	Will use balance for FY18 CIP
2013-114	DPW	FY14 WATER QUALITY EVALUATION	300,000.00	173,524.79	115,475.21	11,000.00	Implementation Underway	Expires when encumbrance is paid or liquidated
2013-115	DPW	FY14 BUMPS RIVER BRIDGE	120,000.00	0.00	0.00	120,000.00	Inactive	Will use balance for FY18 CIP
2013-116	CSD	FY14 TENNIS COURTS RECONSTRUCTION	500,000.00	338,140.04	7,000.00	154,859.96	Implementation Underway	Expires when encumbrance is paid or liquidated
2014-092	SCH	EARLY LEARNING CENTER 20	2,567,477.00	2,562,110.33	3,169.00	2,197.67	Completed	Will use balance for FY18 CIP
2014-093	SCH	INTERMEDIATE SCHL IMPRVM	200,000.00	190,173.34	0.00	9,826.66	Completed	Will use balance for FY18 CIP
2014-096	SCH	BU A/C AND CHILLER PIPES	200,000.00	177,528.62	11,550.50	10,920.88	Construction	Expires when encumbrance is paid or liquidated
2014-097	SCH	BPS LOCK UPGRADES 2015	100,000.00	79,654.75	0.00	20,345.25	Completed	Will use balance for FY18 CIP
2014-100	ASD	FY15 AERIAL FLYOVER & MAPPING	140,000.00	135,514.85	3,328.45	1,156.70	Implementation Underway	Expires when encumbrance is paid or liquidated
2014-101	GMD	FY15 BICYCLE ACCOMODATIONS	170,000.00	0.00	0.00	170,000.00	Inactive	Will use balance for FY18 CIP
2014-102	POL	FY15 POLICE FACILITY IMPROVEMENTS	288,000.00	133,908.02	42,279.00	111,812.98	Construction	Expires when encumbrance is paid or liquidated
2014-103	RSD	FY15 HYDRILLA LONG POND	75,000.00	64,443.00	0.00	10,557.00	Implementation Underway	Expires June 30, 2017
2014-104	RSD	FY15 FANWORT LAKE WEQUAQUET	100,000.00	92,539.96	1,725.00	5,735.04	Implementation Underway	Expires June 30, 2017
2014-106	CSD	FY15 PARKING LOT EXPANSION - SENIOR CENTER	290,000.00	136,932.35	44,550.00	108,517.65	Construction	Expires June 30, 2017
2014-108	CSD	FY15 MARSTONS MILLS FISH RUN	393,500.00	20,277.98	0.00	373,222.02	Design	Expires June 30, 2017
2014-109	CSD	FY15 MILL POND & LONG POND FISHWAYS	42,000.00	7,298.00	29,192.00	5,510.00	Construction	Expires June 30, 2017
2014-111	CSD	FY15 VETERANS' PARK PLAN	50,000.00	29,449.93	10,678.07	9,872.00	Implementation Underway	Expires June 30, 2017
2014-114	DPW	FY15 PUBLIC ROAD MAINTENANCE	3,250,000.00	2,907,345.51	2,862.46	339,792.03	Construction	Expires June 30, 2017
2014-116	DPW	FY15 COMPREHENSIVE DREDGING PERMIT	350,310.00	133,715.15	104,202.65	112,392.20	Implementation Underway	Expires June 30, 2017
2014-118	CSD	FY15 CENTERVILLE RECREATION BUILDING	185,000.00	23,123.92	3,100.57	158,775.51	Construction	Expires June 30, 2017
2014-119	DPW	FY15 TOWN FACILITIES SECURITY IMPROVEMENTS	100,000.00	8,000.00	0.00	92,000.00	Implementation Underway	Expires June 30, 2017
2014-120	DPW	FY15 PAINE BLACK HOUSE UPGRADES	240,000.00	197,623.98	29,526.11	12,849.91	Construction	Expires June 30, 2017
2015-030	RSD	FY15 E-PERMITTING PROJECT	211,544.00	193,125.12	0.00	18,418.88	Implementation Underway	Expires June 30, 2017
2015-045	SCH	HY WEST & BWB SCHOOL IMP	172,000.00	158,315.00	0.00	13,685.00	Completed	Will use balance for FY18 CIP
2015-063	DPW	FY15 TECH EVAL STEWARTS CREEK	40,000.00	38,575.00	0.00	1,425.00	Completed	Expires June 30, 2017
2015-065	TM	LAND ACQUISITION - COTUIT	300,000.00	300,000.00	0.00	0.00	Completed	Expires June 30, 2017
2015-096	DPW	FY16 PUBLIC ROAD MAINTENANCE	3,250,000.00	3,039,803.45	144,480.44	65,716.11	Construction	Expires June 30, 2018

GENERAL FUND – CONTINUED:

						Balance		
Council						Available		
Order	Dept.	Project Title	Appropriation	Expended	Encumbered	1/31/2017	Project Status	Appropriation Status
2015-097	DPW	FY16 SCHOOL ZONE TRAFFIC	92,700.00	0.00	0.00	92,700.00	To be scheduled	Expires June 30, 2018
2015-098	DPW	FY16 GUARDRAIL & SIDEWALK IMPROVEMENTS	400,000.00	258,509.70	43,600.30	97,890.00	Construction	Expires June 30, 2018
2015-099	CSD	FY16 BAY STREET BOAT RAMP	289,000.00	2,864.32	286,135.68	0.00	Construction	Expires June 30, 2018
2015-100	POL	FY16 POLICE FACILITY IMPROVEMENTS	355,000.00	30,000.00	0.00	325,000.00	Design	Expires June 30, 2018
2015-101	DPW	FY16 TOWN HALL IMPROVEMENTS	939,000.00	42,625.00	5,775.00	890,600.00	Design	Expires June 30, 2018
2015-103	CSD	FY16 JFK MEMORIAL RESTORATION	87,000.00	17,321.60	68,000.00	1,678.40	Design	Expires June 30, 2018
2015-111	CSD	FY16 JOSHUA'S POND SITE	317,000.00	18,187.15	20,706.25	278,106.60	Design	Expires June 30, 2018
2015-112	RSD	FY16 ALUM TREATMENT - HAMBLINS POND	300,000.00	270,390.00	15,690.00	13,920.00	Implementation Underway	Expires June 30, 2018
2015-113	RSD	FY16 HYDRILLA CONTROL PR	100,000.00	100,000.00	0.00	0.00	Completed	Expires June 30, 2018
2015-114	DPW	FY16 DEMO PORTABLS @ MM SCHOOL	50,000.00	9,981.98	0.00	40,018.02	Design	Expires June 30, 2018
2015-115	SCH	CONSTRUCT MODULAR CLASSR	4,151,718.50	4,135,719.40	2,500.00	13,499.10	Completed	Will use balance for FY18 CIP
2015-116	SCH	FACADE/ROOF IMPROVEMENTS	3,353,000.00	3,087,376.48	92,907.88	172,715.64	Completed	Will use balance for FY18 CIP
2015-117	SCH	FACADE & ROOF IMPRVMNTS	260,000.00	83,377.28	176,622.72	0.00	Construction	Expires June 30, 2017
2015-118	SCH	INTERNET & DIGITAL RESOU	213,000.00	211,900.28	990.00	109.72	Construction	Expires June 30, 2017
2015-119	SCH	BOILER REPLACEMENT - HS	350,000.00	287,429.85	7,811.00	54,759.15	Completed	Will use balance for FY18 CIP
2015-120	SCH	REPLACE A/C-WEST VILLAGE	250,000.00	249,738.42	0.00	261.58	Construction	Expires June 30, 2017
2015-121	SCH	INSTALL COGENERATION PLA	50,000.00	0.00	0.00	50,000.00	Not implemented	Will use balance for FY18 CIP
2016-026	DPW	FY16 SHOOTING RANGE MONITORING	35,000.00	27,610.30	1,000.00	6,389.70	Implementation Underway	Expires June 30, 2018
2016-031	DPW	FY16 CRAIGVILLE BATHHOUSE IMPROVEMENTS	481,156.00	244,729.30	236,426.70	0.00	Construction	Expires June 30, 2018
2016-035	DPW	FY16 BARNSTABLE HARBOR DREDGING	490,000.00	461,969.88	0.00	28,030.12	Construction	Expires June 30, 2018
2016-037	DPW	FY16 PRIVATE RD REPAIRS	323,386.00	287,807.34	3,500.00	32,078.66	Construction	Expires June 30, 2018
2016-039	DPW	FY16 GPS VEHICLE LOCATOR SYSTEM	145,000.00	81,378.00	43,662.40	19,959.60	Implementation Underway	Expires June 30, 2018
2016-076	RSD	FY16 BISMORE PARK REPAIR	15,000.00	9,207.82	4,640.00	1,152.18	Implementation Underway	Expires June 30, 2018
2016-081	SCH	FACADE & ROOF IMPROVMNTS	4,286,000.00	19,066.59	101,132.55	4,165,800.86	Construction	Expires June 30, 2018
2016-082	SCH	LT POLE REPLMT/REST RM F	475,000.00	30,523.00	29,500.00	414,977.00	Construction	Expires June 30, 2018
2016-083	SCH	UNIT VENTILATOR UPGRADES	250,000.00	103,986.42	144,731.50	1,282.08	Construction	Expires June 30, 2018
2016-084	SCH	PUMP FLANGE REPLMT-BHS	70,000.00	45,115.08	1,000.00	23,884.92	Construction	Expires June 30, 2018
2016-085	SCH	WALK-IN COOLER REPLMT-BH	160,000.00	158,853.64	1,146.36	0.00	Construction	Expires June 30, 2018
2016-086	ASD	FY17 IT HARDWARE & SOFTWARE UPGRADES	418,000.00	0.00	0.00	418,000.00	To be scheduled	Expires June 30, 2018
2016-087	GMD	FY17 MM LAND ACQUISITION & PARK DESIGN	290,000.00	264,900.00	0.00	25,100.00	Implementation Underway	Expires June 30, 2018
2016-088	GMD	FY17 WALKWAY TO THE SEA SHANTIES	106,000.00	0.00	0.00	106,000.00	To be scheduled	Expires June 30, 2018
2016-089		FY17 WATER QUALITY SCHOOLHOUSE POND	55,000.00	44,852.00	0.00		Implementation Underway	
2016-102	DPW	FY17 PUBLIC ROAD MAINTENANCE	3,250,000.00	1,119,471.36	453,684.68		Construction	Expires June 30, 2018
2016-103	DPW	FY17 SIDEWALKS & GUARDRAILS	730,000.00	0.00	173,919.22	556,080.78	Construction	Expires June 30, 2018
2016-104	DPW	FY17 MS4 STORM MGMT PLAN	87,500.00	0.00	0.00	87,500.00	To be scheduled	Expires June 30, 2018
2016-105	DPW	FY17 TRAFFIC SIGNAL UPGRADES	150,000.00	0.00	0.00	150,000.00	To be scheduled	Expires June 30, 2018
2016-110	CSD	FY17 BEACH FACILITY IMPROVEMENTS	618,717.00	16,720.00	1,280.00	600,717.00	Design	Expires June 30, 2018

GENERAL FUND – CONTINUED:

						Balance		
Council						Available		
Order	Dept.	Project Title	Appropriation	Expended	Encumbered	1/31/2017	Project Status	Appropriation Status
2016-111	DPW	FY17 BLISH POINT DREDGING	1,079,788.00	0.00	0.00	1,079,788.00	To be scheduled	Expires June 30, 2018
2016-112	CSD	FY17 OSTERVILLE BAY SITE IMPROVEMENTS	900,444.00	35,099.00	103,500.00	761,845.00	Implementation Underway	Expires June 30, 2018
2016-113	CSD	FY17 LOMBARD FIELD IMPROVEMENTS	1,686,000.00	76,018.27	45,944.48	1,564,037.25	Implementation Underway	Expires June 30, 2018
2017-030	DPW	FY17 PRIVATE ROAD REPAIRS	180,000.00	830.00	0.00	179,170.00	Implementation Underway	Expires June 30, 2018
			44,853,240.50	25,303,816.80	3,078,594.97	16,470,828.73		

AIRPORT ENTERPRISE FUND:

						Balance		
Council						Available		
Order	Dept.	Project Title	Appropriation	Expended	Encumbered	1/31/2017	Project Status	Appropriation Status
2010-095	AIR	RUNWAY 15 RVZ CLEARING	75,000.00	64,674.52	2,270.48	8,055.00	Implementation Underway	Expires when encumbrance is paid or liquidated
2011-079	AIR	GROUNDWATER BIOREMEDIATION	207,000.00	96,609.09	110,370.91	20.00	Implementation Underway	Expires when encumbrance is paid or liquidated
2012-091	AIR	RUNWAY 15 RVZ CLEARING	246,000.00	241,079.57	1,175.95	3,744.48	Implementation Underway	Expires when encumbrance is paid or liquidated
2012-094	AIR	TERMINAL ENHANCEMENTS	200,000.00	32,878.12	78,075.00	89,046.88	Implementation Underway	Expires when encumbrance is paid or liquidated
2013-098	AIR	TERMINAL & AARF IMPVMTS	200,000.00	36,001.26	61,900.00	102,098.74	Implementation Underway	Expires when encumbrance is paid or liquidated
2013-099	AIR	ACCESS CONTROL & SECURITY	90,000.00	9,176.48	5,000.00	75,823.52	Implementation Underway	Expires when encumbrance is paid or liquidated
2013-102	AIR	CONSTRUCT FUEL FARM	1,540,000.00	1,382,584.66	4,361.70	153,053.64	Construction	Expires when encumbrance is paid or liquidated
2014-082	AIR	PAINTING RUNWAYS	50,000.00	36,263.73	0.00	13,736.27	Implementation Underway	Expires June 30, 2017
2014-085	AIR	RECONSTRUCT RUNWAY 15-33	400,000.00	361,376.30	38,623.70	0.00	Construction	Expires when encumbrance is paid or liquidated
2014-086	AIR	RECONSTRUCT RUNWAY 6-24	400,000.00	0.00	0.00	400,000.00	To be scheduled	Expires June 30, 2017
2014-087	AIR	PLACE EAST RAMP T-HANGAR	100,000.00	0.00	0.00	100,000.00	To be scheduled	Expires June 30, 2017
2014-090	AIR	TERMINAL & BLDG IMPROVEM	200,000.00	0.00	0.00	200,000.00	To be scheduled	Expires June 30, 2017
2015-123	AIR	REPLACE SNOW REMOVAL EQU	1,075,000.00	0.00	0.00	1,075,000.00	To be scheduled	Expires June 30, 2018
2015-124	AIR	REPLACE GENERATOR/REMOVE	90,000.00	1,728.32	0.00	88,271.68	To be scheduled	Expires June 30, 2018
2015-127	AIR	REPLACE AIRFIELD EQUIPME	162,000.00	0.00	0.00	162,000.00	To be scheduled	Expires June 30, 2018
2016-090	AIR	AIRFIELD IMPRVMT	7,018,090.00	8,800.00	6,985,084.40	24,205.60	Construction	Expires June 30, 2019
2016-091	AIR	SNOW REMOVAL/RESCUE EQUI	100,000.00	0.00	0.00	100,000.00	To be scheduled	Expires June 30, 2019
2016-092	AIR	RUNWAY/TAXIWAY MARKINGS	150,000.00	35,787.96	7,738.44	106,473.60	Implementation Underway	Expires June 30, 2019
			12,303,090.00	2,306,960.01	7,294,600.58	2,701,529.41		

GOLF ENTERPRISE FUND:

						Balance		
Council						Available		
Order	Dept.	Project Title	Appropriation	Expended	Encumbered	1/31/2017	Project Status	Appropriation Status
2015-105	GOLF	FACILITY IMPROVEMENTS -	174,000.00	49,500.00	2,579.52	121,920.48	Construction	Expires June 30, 2018
2016-107	GOLF	CLUB FACILITY IMPROV-OBF	258,000.00	7,690.00	0.00	250,310.00	Design	Expires June 30, 2019
2015-106	GOLF	FACILITY IMPROVEMENTS -	140,000.00	22,080.96	115,537.84	2,381.20	Construction	Expires June 30, 2018
2016-108	GOLF	CLUB FACILITY IMPROV-HYA	307,000.00	0.00	240,475.00	66,525.00	Construction	Expires June 30, 2019
			879,000.00	79,270.96	358,592.36	441,136.68		

SOLID WASTE ENTERPRISE FUND:

						Balance		
Council						Available		
Order	Dept.	Project Title	Appropriation	Expended	Encumbered	1/31/2017	Project Status	Appropriation Status
2014-081	SWD	SOLID WASTE MASTER PLAN	75,000.00	43,741.80	31,258.20	0.00	Design	Expires June 30, 2017
2015-092	SWD	REPLACE TRUCK SCALE	50,000.00	0.00	0.00	50,000.00	To be scheduled	Expires June 30, 2018
2015-094	SWD	ROLL-OFF TRAILER	50,000.00	0.00	0.00	50,000.00	To be scheduled	Expires June 30, 2018
2015-095	SWD	PURCHASE COMPACTOR UNITS	100,000.00	0.00	0.00	100,000.00	To be scheduled	Expires June 30, 2018
2016-099	SWD	MACK TRUCK REPLMT	150,000.00	129,800.00	0.00	20,200.00	Completed	Expires June 30, 2019
2016-100	SWD	VEHICLE REPLACEMENT	50,000.00	42,574.00	0.00	7,426.00	Completed	Expires June 30, 2019
2016-101	SWD	SITE IMPROVEMENTS	2,500,000.00	0.00	138,421.80	2,361,578.20	Design	Expires June 30, 2019
			2,975,000.00	216,115.80	169,680.00	2,589,204.20		

WATER POLLUTION CONTROL ENTERPRISE FUND:

						Balance		
Council						Available		
Order	Dept.	Project Title	Appropriation	Expended	Encumbered	1/31/2017	Project Status	Appropriation Status
2007-091	WPC	TURBINE GENERATOR HYA	570,000.00	273,901.90	296,098.10	0.00	Construction	Expires when encumbrance is paid or liquidated
2013-091	WPC	BACK-UP PUMP-BEARSE'S WA	80,000.00	41,068.47	0.00	38,931.53	Completed	Expires June 30, 2017
2013-092	WPC	PRETREATMENT BLDG & CLAR	50,000.00	49,845.60	0.00	154.40	Completed	Expires June 30, 2017
2013-093	WPC	HYDRAULIC LOAD TESTING A	50,000.00	9,320.46	22,679.54	18,000.00	Implementation Underway	Expires when encumbrance is paid or liquidated
2014-076	WPC	SEPTAGE BLDG EVALUATION-	450,000.00	39,921.60	269,430.00	140,648.40	Implementation Underway	Expires when encumbrance is paid or liquidated
2014-077	WPC	GENERATOR STORAGE BLDG	132,000.00	17,570.00	4,950.00	109,480.00	Construction	Expires June 30, 2017
2014-078	WPC	PLANT UPGRADE STUDY 2015	200,000.00	0.00	0.00	200,000.00	To be scheduled	Expires June 30, 2017
2015-089	WPC	RELINE SEWERS/LATERALS -	84,500.00	0.00	0.00	84,500.00	To be scheduled	Expires June 30, 2018
2015-090	WPC	EVALUATE-SEWER COLLECTIO	200,000.00	0.00	0.00	200,000.00	To be scheduled	Expires June 30, 2018
2015-091	WPC	REHAB TREATMENT PLANT CL	1,000,000.00	56,693.15	943,306.85	0.00	Construction	Expires June 30, 2018
2016-097	WPC	CLARIFIERS REHAB	1,289,505.00	0.00	1,023,881.00	265,624.00	Construction	Expires June 30, 2019
2016-098	WPC	BACKUP GENERATOR REPLMT	904,000.00	25,537.47	532,184.47	346,278.06	Construction	Expires June 30, 2019
			5,010,005.00	513,858.65	3,092,529.96	1,403,616.39		

WATER SUPPLY ENTERPRISE FUND:

						Balance		
Council						Available		
Order	Dept.	Project Title	Appropriation	Expended	Encumbered	1/31/2017	Project Status	Appropriation Status
2012-084	WS	NEW WATER MAIN-SCUDDER A	1,070,000.00	992,461.41	77,538.59	0.00	Construction	Expires when encumbrance is paid or liquidated
2013-085	WS	PIPE REPLACEMENT & UPGRA	1,050,000.00	1,014,645.85	32,954.15	2,400.00	Construction	Expires when encumbrance is paid or liquidated
2013-087	WS	WELL EXPLORATION PROGRAM	489,500.00	0.00	0.00	489,500.00	To be implemented	Expires June 30, 2017
2013-088	WS	AIR STRIPPER UPGRADE 201	300,000.00	267,266.99	0.00	32,733.01	Completed	Expires June 30, 2017
2014-071	WS	PIPE UPGRADE & REPLACEME	1,050,000.00	923,537.07	59,258.22	67,204.71	Construction	Expires when encumbrance is paid or liquidated
2014-073	WS	NEW WELL EXPLORATION 201	583,000.00	0.00	0.00	583,000.00	To be implemented	Expires June 30, 2017
2014-074	WS	MARY DUNN TANK 2 PAINTIN	68,400.00	51,478.78	3,702.50	13,218.72	Construction	Expires June 30, 2017
2014-075	WS	WATER MAIN UPGRADES 2015	95,900.00	0.00	0.00	95,900.00	To be implemented	Expires June 30, 2017
2015-085	WS	PIPE REPLACEMENT & UPGRA	1,050,000.00	155,246.58	894,753.42	0.00	Construction	Expires June 30, 2018
2015-086	WS	PUMP STATION/TREATMT PLA	200,000.00	196,775.30	3,224.70	0.00	Construction	Expires June 30, 2018
2015-146	WS	INSTALL CARBON FILTER TR	744,000.00	700,293.57	8,544.19	35,162.24	Construction	Expires June 30, 2018
2016-093	WS	PIPE REPLMT/UPGRADE	1,050,000.00	30,363.83	44,747.33	974,888.84	Construction	Expires June 30, 2019
2016-094	WS	PUMP STATION UPGRADES	200,000.00	122,309.39	34,335.50	43,355.11	Construction	Expires June 30, 2019
2016-095	WS	MARY DUNN TANK UPGRADE	52,000.00	2,200.00	21,100.00	28,700.00	Construction	Expires June 30, 2019
2016-096	WS	INTERCONNECTIONS WATER S	400,000.00	328,380.86	45,279.55	26,339.59	Construction	Expires June 30, 2019
2016-163	WS	MARY DUNN #3 TREATMENT S	540,000.00	433,071.43	82,421.53	24,507.04	Construction	Expires June 30, 2019
2017-010	WS	3 BUILDINGS FOR CARBON T	1,113,000.00	411,077.66	688,632.00	13,290.34	Construction	Expires June 30, 2019
			10,055,800.00	5,629,108.72	1,996,491.68	2,430,199.60		

MARINA ENTERPRISE FUND:

						Balance		
Council						Available		
Order	Dept.	Project Title	Appropriation	Expended	Encumbered	1/31/2017	Project Status	Appropriation Status
2012-095	APR	GATEWAY MARINA DREDGING DESIGN	80,000.00	52,610.65	0.00	27,389.35	Completed	Expires June 30, 2017
2015-108	MAY	DREDGING - GATEWAY MARINA	280,000.00	254,161.26	25,838.74	0.00	Construction	Expires when encumbrance is paid or liquidated
2015-108	JUN	RECONSTRUCT PRINCE COVE	570,000.00	228.00	184.80	569,587.20	Design	Expires June 30, 2018
2015-108	JUL	HYANNIS HARBOR BULKHEAD-	158,000.00	0.00	0.00	158,000.00	To be scheduled	Expires June 30, 2018
2016-109	AUG	GATEWAY MARINA DREDGING	500,000.00	401,456.40	45,534.02	53,009.58	Construction	Expires when encumbrance is paid or liquidated
			1,588,000.00	708,456.31	71,557.56	807,986.13		

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2018 CIP -

PART III – CAPITAL SUBMISSION REVIEW PROCESS

The Town Administration has implemented a review process for capital submissions that uses 10 evaluation criteria with which each submission is scored. A task force made up of senior level managers across all departments is assigned the responsibility to review all submissions and score them accordingly. The scores of the task force members are then averaged and project submissions are ranked from highest to lowest score. This does not determine which projects will receive funding in the immediate fiscal year but is used as an objective measurement to assess the projects priority against all other submissions. The evaluation criteria used is included in Appendix C. The scores for each project submitted are on the following tables. Projects highlighted are those being recommended for funding in fiscal year 2018.

Enterprise Funds

Fund			Average
Priority	Fund	Project Title	Score
2	BMA	Comprehensive FAA Airport Layout Plan/FAA Master Plan Update	24.00
10	BMA	Reconstruct Runway 6-24	23.57
1	BMA	Obstruction Mitigation Plan and Airspace Analysis	23.29
3	BMA	Airport Access Control and Security Improvements	23.00
6	BMA	Runway 24 Departure End Safety Area	22.57
13	BMA	Design, Realign, and Reconstruct Taxiway Delta & Echo at Runway 15-33 Intersection	22.43
15	BMA	Design and Reconstruct a Portion of Taxiway Bravo (B)	22.14
4	BMA	Clear Vegetation and Obstruction Removal - Airport Perimeter	22.00
12	BMA	Replace Aircraft Rescue and Fire Fighting Equipment (ASV Skid Steer Plow & Firefight Truck)	21.79
14	BMA	Environmental Assessment for FAA Master Plan Projects and Phased Permitting	21.71
8	BMA	Design and Replace Mo-Gas and Diesel Fuel Con Vault, Gas Boy & Alarm	21.50
5	BMA	Runway and Taxiway Markings and Airport-Owned Roadways Annual Painting Contract	20.79
11	BMA	Replace Airport Perimeter Fence	20.57
7	BMA	Design and Construct Snow Removal Equipment (SRE) Vehicle Storage Building	19.71
9	BMA	Design and Construct New T-Hangar	18.43
1	GOLF	Hyannis Golf Course Restoration	22.00
4	GOLF	Hyannis Golf Course Facility Improvements and Fixtures replacement	21.86
3	GOLF	Olde Barnstable Fairgrounds Golf Club Facility Improvements	21.43
2	GOLF	Hyannis Golf Course Turf Maintenance and Equipment Replacement	21.07
	•		
1	SNDY	Beach Park Coastline Stablization	24.93
	-		
1	MAR	Bismore Park Bulkhead Improvement Design	23.50
1	WPC	Pump Station Evaluation	24.29
7	WPC	Pump Station Rehabilitation	23.71
5	WPC	South Street Sewer Rehabilitation	23.43
8	WPC	Sewer Rehabilitation Program	23.00
6	WPC	Septage Building Construction	22.43
4	WPC	Barnstable Road Sewer Evaluation, Design and Construction	22.36
3	WPC	Treatment Plant Modeling - Biowin Model	20.00
9	WPC	MSB Generator Design and Construction	19.31
2	WPC	New 3/4 Ton Pickup Truck	16.50
	1		
1	WS	Lease Buy-out of (3) activated carbon filter units - Mary Dunn 1, 2 & 3 wells	23.43
2	WS	Well Reactivation Project	23.36
8	WS	New Well Exploration Program	23.21
3	WS	Pipe Replacement and Upgrade Program	22.93
4	WS	Wells, Pump Stations, Treatment Plant Repair & Upgrade Program	22.57
9	WS	Barnstable Road Water Main Upgrade	22.36
7	WS	Interconnectios With Other Water Systems	21.93
5	WS	Water Storage Tank (Mary Dunn 1) New Roof, Appurtenances & Site Work Construction	20.64
6	WS	New Pickup Truck	14.86

General Fund

Dept			Average
Priority	Dept	Project Title	Score
1	DPW	Public Roads Maintenance	26.29
2	DPW	Sidewalk Overlay and Guardrail	22.14
3	CSD	Bathhouse Septic Upgrades Program	21.36
5	CSD	Kennedy Memorial Renovation Construction	21.36
1	SCH	Barnstable High School Stadium Bleachers	21.15
9	CSD	Centerville Recreation Interior Improvements	21.14
14	DPW	JFK Museum Plaza Replacement	21.00
2	CSD	Craigville Bathhouse Site Work	20.86
23	DPW	Kennedy Legacy Trail Sidewalk Improvements Design & Construction	20.71
4	SCH	Unit Ventilator Upgrades	20.62
21	DPW	Bumps River Bridge Construction	20.50
1	RSD	Hydrilla Control - Mystic Lake, Middle Pond, and Long Pond (Centerville)	20.38
10	CSD	Beach Parking Lot Rehabilitation-Covell's Beach	20.21
2	POL	Barnstable Police Department Dispatch Center Renovations	20.14
2	SCH	Barnstable High School 21st Century Learning Space Project	20.08
15	CSD	Scudder's Lane Boat Ramp Design & Construction	20.07
15	SCH	Barnstable Public Schools Asbestos Abatement	20.07
7	CSD	Blish Point Design for Long Term Solutions	19.93
13	CSD	Hyannis Breakwater Study Preliminary Design & Future Construction	19.93
13 7	SCH	Barnstable West Barnstable Roof Replacement	19.93
6	CSD		
18	DPW	West Bay Channel Dredging Design & Permitting	19.86
		Snow's Creek Culvert- Construction	19.86
3	SCH	Barnstable High School Cafeteria Storefront and Window Replacement	19.77
11	SCH	Communications and Security Network Upgrades	19.77
12	CSD	Mill Pond & Long Pond Fish Ways - Construction	19.64
25	DPW	MS4 Municipal Separate Storm Sewer System Program	19.57
9	SCH	Replace HVAC Roof Top Unit (RTU's) at Barnstable High School and Barnstable Middle School	19.54
11	CSD	West Bay Breakwater-Permitting and Construction	19.50
10	DPW	Hyannis Main Street West End Rotary Study, Design & Construction	19.50
8	DPW	Town Hall Complex Improvements-Parking Lot	19.43
11	DPW	Parking Lot Maintenance	19.43
17	DPW	Huckin's Neck Road Reconstruction	19.36
8	SCH	Campus Wide Mechanical Upgrades (Burners, Boilers, HVAC & Pumps)	19.23
19	DPW	Town Hall Interior Renovations	19.21
5	SCH	Network Infrastructure Upgrades	19.15
4	CSD	Osterville Recreation Building Design & Construction	19.07
25	SCH	Field / Ground Improvements	19.00
7	DPW	Private Road Repair	18.93
12	SCH	West Villages Elementary Emergency Generator Replacement	18.85
27	SCH	Hyannis West Elementary Roof Replacement	18.85
6	SCH	Hyannis West Walk-In Cooler Replacement	18.77
28	SCH	Centerville Elementary Roof Replacement	18.69
31	DPW	Craigville Beach Road Pump Station and Force Main	18.64
21	SCH	Electric Utility Transformer Upgrade	18.62
24	DPW	Traffic Signal Upgrades Study, Design & Construction	18.57
43	DPW	South Street Improvements Design & Construction	18.57
14	CSD	Centerville Recreation Building Site Design & Construction	18.50
20	DPW	U.S. Custom House Interior Work	18.50
17	SCH	Field House Improvements	18.46
1	POL	Barnstable Police Department Window Replacement	18.43
10	SCH	Upgraded Modular Office Space (BPS Transportation & Food Services)	18.38
44	DPW	Sidewalk Installations Bumps River Rd Centerville, Main St Cotuit, South St Hyannis	18.36
13	SCH	Exterior/Interior Door Replacement	18.31
12	DPW	ADA Compliance Pedestrian Crossing & Sidewalks Report, Design & Construction	18.14
26	DPW	West Barnstable Railroad Depot Restoration	18.07
1	CSD	Barnstable Senior Center Stand-by Generator	18.00
40	DPW	DPW Salt Storage Facility	18.00
3	DPW	Town Hall Restrooms Renovations	17.79

Dept			Avera
Priority	Dept	Project Title	Score
14	SCH	Facilities Maintenance Shop Roof Replacement	17.69
42	DPW	Barnstable Road Reconstruction Design & Construction	17.64
28	DPW	School Administration Building Mechanical Upgrades	17.57
29	SCH	Bubbler and Water Cooler Replacement	17.54
39	DPW	Coastal Resiliency Master Plan Development	17.50
24	SCH	Centerville Elementary School Window Replacement	17.46
8	CSD	MEA Interior Project Phase III	17.29
27	DPW	Bearse's Way Bike Path Construction	17.29
37	DPW	Marstons Mills Airport Fuel Tank Replacement	17.29
5	DPW	Cotuit Enhanced ADA Compliant Pedestrian Crossing	17.21
15	DPW	Mosswood Cemetery Building Improvements	17.21
22	DPW	Cape Cod Airfield Hangar Repair	17.21
26	SCH	Synthetic Turf Replacement	17.1
16	DPW	DPW Offices Phase III Construction	17.14
23	SCH	Flooring Replacement and Upgrades	17.08
16	SCH	BPS Campus Wide Paving	17.0
22	SCH	District Masonry Personnel	16.9
15	SCH	BPS Campus Wide Painting	16.7
6	DPW	Town Hall & School Administration Building Masonry Sealer	16.6
9	DPW	Town Hall Security Improvements	16.5
29	DPW	Highway Truck Storage Facilities Design & Construction	16.5
33	DPW	Old Jail Repairs	16.5
20	SCH	Centerville Elementary School Elevator Project	16.5
4	DPW	Sidewalks on Pitchers Way (Bearse's Way to Route 28) Design & Construction	16.5
36	DPW	Highway Division/Administrative Services Division Parking Lot Rehabilitation	16.5
38	DPW	Armory Building Envelope, Electrical, and Mechanical Improvements	16.3
13	DPW	West Barnstable Shooting Range	16.2
30	DPW	Bay Shore Road Boat Ramp Design & Construction	16.2
41	DPW	Cape Cod Rail Trail Extension Shared Use Path Sandwich to Yarmouth-Design	16.0
35	DPW	U.S. Custom House Site Improvements	15.7
16	CSD	Millway Beach ADA Access	15.6
34	DPW	U.S. Custom House Carriage House Design & Construction	15.6
19	SCH	Barnstable United Courtyard Improvements	15.6
32	DPW	Burgess Barn Interior	15.3
17	CSD	MEA Bldg Site Work Improvements Phase IV	15.2
1	ASD	Finance Dept-Tyler Content Manager	14.5
45	DPW	Traffic Calming	14.3
18	CSD	MEA Storage Building Phase V	14.0

Many of the highest scoring projects are recommended for funding in FY 2018. Some of the higher scoring projects that did not receive any funding in FY18 may be a result of the project not being ready for the construction phase, the cost requires further evaluation, funding is not available or the department submitted the project with a request for funding in a subsequent year.

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2018 CIP-

PART IV – TOWN MANAGER RECOMMENDATIONS

Project Recommendation Rationale

Several factors were taken into consideration when determining which projects to recommend for funding in Fiscal Year 2018. In addition to reviewing the scoring by the Senior Staff I was particularly focused on projects that had received previous funding and are ready for the next stage of their development; projects that would contribute to the economic development of the Town; projects that would preserve important infrastructure components of the Town; projects that improve high usage assets; projects that have outside funding available to offset the costs or can be covered by user fees; and projects that have an important public safety component associated with them. Using these criteria, I am recommending the following list of projects:

	1		1			1
Project Title and Council Order Number	Received Previous Funding	Contributes To Economic Development	Preservation of Asset	High Usage Asset	Important Public Safety/Health Component	User Fees or Other Funding Available
AIRPORT:						
					x	х
Obstruction Mitigation Plan and Airspace Analysis 2017-090 Comprehensive FAA Airport Layout Plan/FAA Master Plan						
Update 2017-091						x
Airport Access Control and Security Improvements 2017-092					x	x
Clear Vegetation and Obstruction Removal - Airport Perimeter 2017-093					x	x
Runway and Taxiway Markings and Airport-Owned Roadways Annual Painting Contract 2017-094					x	x
GOLF COURSES:						
Hyannis Golf Course Turf Maintenance and Equipment			x	x		x
Replacement 2017-070			X	X		X
WASTE WATER:		-				
Pump Station Evaluation 2017-080			х	х	x	x
New 3/4 Ton Pickup Truck 2017-081				x		x
Treatment Plant Modeling - Biowin Model 2017-082				х	x	x
Barnstable Road Sewer Evaluation, Design and Construction 2017-083		x	x	x	x	x
WATER SUPPLY:						
Lease Buy-out of (3) activated carbon filter units - Mary Dunn 1,	x	х	x	х	x	x
2 & 3 wells 2017-084	x	x			x	x
Well Reactivation Project 2017-085 Pipe Replacement and Upgrade Program 2017-086	x	x	x	x	x	x
Wells, Pump Stations, Treatment Plant Repair & Upgrade						
Program 2017-087	x	x	х	х	x	x
Water Storage Tank (Mary Dunn 1) New Roof, Appurtenances & Site Work Construction 2017-088			x	x	x	x
New Pickup Truck 2017-089				х		х
GENERAL FUND:						
Public Roads Maintenance 2017-076			х	Х	х	
JFK Museum Plaza Replacement 2017-077		x	х	x	х	
Sidewalks & Guardrails & Cotuit Enhanced ADA Compliant Pedestrian Crossing 2017-078			x	х	x	
West Barnstable Shooting Range 2017-079	x		x		x	
Finance Dept-Tyler Content Manager 2017-095				х		
Centerville Recreation Interior Improvements	х		х	х		x
Osterville Recreation Building Design & Construction 2017-071	x		x	х		x
Barnstable Senior Center Stand-by Generator 2017-072				х	х	x
Barnstable Police Department Dispatch Center Renovations 2017-073	x		x	х	x	
Town Hall Restroom Renovations 2017-074	x		x	х	x	
Town Hall & School Administration Building Masonry Sealer			x	x		
2017-075 Hydrilla Control - Mystic Lake, Middle Pond, and Long Pond			<u> </u>	^		
(Centerville) 2017-069	х		x			
Unit Ventilator Upgrades 2017-062			x	х		
Barnstable High School 21st Century Learning Space Project 2017-063			x	х		
Network Infrastructure Upgrades 2017-064			х	х		
Communications and Security Network Upgrades 2017-065			х	х		
Barnstable Public Schools Asbestos Abatement 2017-066			х	х	x	
High School Stadium Bleachers 2017-067			х		x	
Barnstable High School Cafeteria Storefront and Window Replacement/Barnstable West Barnstable Roof Replacement			x	x		
2017-068		L	I			

This list of projects totals \$17,816,363. The General Fund program totals \$12,700,363 and the Enterprise Funds total \$5,116,000. Funding for the general fund portion of the program consists of \$3,865,000 in Capital Trust Fund (CTF) reserves, \$7,087,000 in new borrowing authorizations, \$40,000 from Community Development Block Grant funds, \$632,363 in transfers from closed appropriations, \$726,000 from the Community Preservation Fund, and \$350,000 from the school department's share of General Fund savings.

Funding for the Enterprise Fund programs consists of using \$881,500 of enterprise fund reserves, \$2,249,000 in new borrowing authorizations, and \$1,985,500 is anticipated to be reimbursed from federal and state granting agencies for the Airport projects. The grant funds received will reduce the amount of any bonds issued or the reserves used to finance the enterprise fund's capital program. The bonds issued for the enterprise fund projects are expected to be paid back with enterprise fund revenues.

Enterprise Funds Recommendations

	Funding Source						
Project Name and Council Order Number	Enterprise Fund Reserves	Bond Issue	Grants	Total			
AIRPORT:	· · · · · ·						
Obstruction Mitigation Plan and Airspace Analysis 2017-090	17,250	-	327,750	345,000			
Comprehensive FAA Airport Layout Plan/FAA Master Plan Update 2017-091	35,000	-	665,000	700,000			
Airport Access Control and Security Improvements 2017-092	37,250	-	707,750	745,000			
Clear Vegetation and Obstruction Removal - Airport Perimeter 2017-093	15,000	-	285,000	300,000			
Runway and Taxiway Markings and Airport-Owned Roadways Annual Painting Contract 2017-094	150,000	-	-	150,000			
Total Airport Enterprise Fund	254,500	-	1,985,500	2,240,000			
GOLF:							
Hyannis Golf Course Turf Maintenance and Equipment Replacement 2017-085	-	325,000	-	325,000			
Total Golf Course Enterprise Fund	-	325,000	-	325,000			

The recommended projects for the Enterprise Funds (continued)

	Funding Source							
Project Name and Council Order Number	Enterprise Fund Reserves	Bond Issue	Grants	Total				
WATER POLLUTION CONTROL:								
Pump Station Evaluation 2017-075	200,000	-	-	200,000				
New 3/4 Ton Pickup Truck 2017-076	55,000	-	-	55,000				
Treatment Plant Modeling - Biowin Model 2017-077	55,000	-	-	55,000				
Barnstable Road Sewer Evaluation, Design and Construction 2017-078	72,000	-	_	72,000				
Total Water Pollution Control Enterprise Fund	382,000	-	-	382,000				
WATER SUPPLY:								
Lease Buy-out of (3) activated carbon filter units - Mary Dunn 1, 2 & 3 wells 2017-079	-	491,000	-	491,000				
Well Reactivation Project 2017-080	-	295,000	-	295,000				
Pipe Replacement and Upgrade Program 2017-081	-	500,000	-	500,000				
Wells, Pump Stations, Treatment Plant Repair & Upgrade Program 2017-082	200,000	-	-	200,000				
Water Storage Tank (Mary Dunn 1) New Roof, Appurtenances & Site Work Construction 2017-083	-	638,000	-	638,000				
New Pickup Truck 2017-084	45,000	-	-	45,000				
Total Water Supply Enterprise Fund	245,000	1,924,000	-	2,169,000				
Total All Enterprise Funds	881,500	2,249,000	1,985,500	5,116,000				

General Fund Recommendations

	Funding Source								
Project Name and Council Order Number	Capital Trust Fund Reserves	Bond Issue	Community Development Block Grant	Transfers	Community Preservation Funds	General Fund Savings	Total		
INFRASTRUCTURE:									
Public Roads Maintenance 2017-071	3,250,000	-	-	-	-	-	3,250,000		
JFK Museum Plaza Replacement 2017-072	-	-	-	235,000	-	-	235,000		
Sidewalks & Guardrails & Cotuit Enhanced ADA Compliant Pedestrian Crossing 2017-073	-	314,000	-	-	-	-	314,000		
West Barnstable Shooting Range 2017-074	-	350,000	-	-	-	-	350,000		
Finance Dept-Tyler Content Manager 2017-095	105,000	-	-	-	-	-	105,000		
Total	3,355,000	664,000	-	235,000	-	-	4,254,000		
MUNICIPAL FACILITIES:									
Town Hall Restroom Renovations 2017-069	-	560,000	-	-	-	-	560,000		
Town Hall & School Administration Building Masonry Sealer 2017-070	116,000	-	-	-	-	-	116,000		
Osterville Recreation Building & Field Design 2017-086	-	675,000	-	-	434,000	-	1,109,000		
Barnstable Senior Center Stand-by Generator 2017-087	154,000	-	40,000	55,000	-	-	249,000		
Barnstable Police Department Dispatch Center Renovations 2017-088	158,000	-	-	-	-	-	158,000		
Centerville Recreation	-	-	-	-	292,000	-	292,000		
Building Windows									

The recommended projects for the General Fund (continued)

	Funding Source						
Project Name and Council Order Number	Capital Trust Fund Reserves	Bond Issue	Community Development Block Grant	Transfers	Community Preservation Funds	General Fund Savings	Total
WATER QUALITY:							
Hydrilla Control - Mystic Lake, Middle Pond, and Long Pond (Centerville) 2017-089	82,000	-	-	-	-	-	82,000
Total	82,000	-	-	-	-	-	82,000
SCHOOL FACILITIES:							
Unit Ventilator Upgrades 2017-062	-	250,000	-	-	-	-	250,000
Barnstable High School 21st Century Learning Space Project 2017-063	-	3,158,000	-	342,363	-	-	3,500,363
Network Infrastructure Upgrades 2017-064	-	-	-	-	-	250,000	250,000
Communications and Security Network Upgrades 2017-065	-	-	-	-	-	100,000	100,000
Barnstable Public Schools Asbestos Abatement 2017-066	-	300,000	-	-	-	-	300,000
High School Stadium Bleachers 2017-067		1,055,000	-	-	-	-	1,055,000
Barnstable High School Cafeteria Storefront and Window Replacement/Barnstable West Barnstable Roof Replacement 2017-068	-	425,000	-	-	-	-	425,000
Total	-	5,188,000	-	342,363	-	350,000	5,880,363
Grand Totals	3,865,000	7,087,000	40,000	632,363	726,000	350,000	12,700,363

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2018 CIP -

School Department General Fund Projects

PROJECT: SCH-18-4

DEPARTMENT PRIORITY: 4 of 29

2017-062

Project Working Title: Unit Ventilator Upgrades

Project Location: District-wide (Barnstable West Barnstable, Hyannis West, Centerville, Barnstable Community Horace Mann Public Charter School, Cotuit & Osterville Elementary Schools)

Project Description: Replace original/outdated unit ventilators at five elementary schools, (106 units).

Project Justification: Current units are 50+ years old, failing and not operating to current American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) and Data Encryption Standards (DES) standards.

Impact of Denial/Postponement: Denial or postponement will continue to affect air quality, occupant health and heating/ventilating efficiency.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	\$15,000	\$30,000
	Construction or Acquisition	\$202,500	\$405,000
	Project Management	\$10,000	\$20,000
	Project Contingency	\$22,500	\$45,000
	Total Project Cost	\$250,000	\$500,000

Basis for Cost Estimates: Consultant engineer, vendor and supplier cost estimates

Project Estimated Completion Date: 2019 Design & Permit (months) 2 Construction (months) 24

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$250,000	Unit Ventilator Replacement
2019	\$250,000	Unit Ventilator Replacement
2020	\$250,000	Unit Ventilator Replacement

Source of Funding: Capital Trust Fund Bond Issue \$250,000

Operating Budget Impact now or in future: Units that are more efficient should reduce energy consumption by at least 10%.







Unit Ventilator

2018 CIP – School Department General Fund Projects

DEPARTMENT PRIORITY: 2 of 29

2017-063

Project Working Title: Barnstable High School 21st Century Learning Space Project

Project Location: 744 West Main Street, Hyannis, MA 02601

Project Description: The HVAC units that service the Barnstable High School Library and adjacent spaces are at the end of life, undersized, inefficient, and no longer able to provide cooling and in jeopardy of losing the ability to provide heat. The existing distribution and return systems are not adequately designed or insulated for the 2-story space necessitating a system redesign with replacement of diffusers and the addition of low return air ducts to better circulate and distribute tempered air. The existing aluminum and single glazed curtain walls are over 40 years old and are nearing their life expectancy and do not meet modern standards. The single-pane glass panels block very little UV light and contribute to extreme heat gain in the summer, forcing the rooftop AC units to work harder and create an uncomfortable interior environment. The aluminum frame and glazing systems are also extremely inefficient at providing thermal resistance. In addition to the mechanical and solar improvements to the physical space, interior improvements to the space would include paint, flooring and furnishings.

Project Justification: Currently during the spring, and summer months the library space becomes very hot and humid making it very uncomfortable for its occupants with the possibility of losing total heating capability during the winter months. The existing space configuration is not conducive to 21st Century Learning and in need of paint and flooring. Interior renovation and refurbishment of the space will provide more flexible use of space for teaching and learning. Additionally, engineering estimates predict a 20% savings in energy costs by redesigning the HVAC and Curtain Walls.

Impact of Denial/Postponement: Denial or postponement of this project will result in continued deterioration of heating, cooling and comfort level and increase in utility costs.

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	\$3,500,363	None
	Total Project Cost	\$3,500,363	None

Basis for Cost Estimates: Engineering/Architect Evaluation and Estimates

Project Estimated Completion Date: 2018 Design & Permit (months) 12 Construction (months) 6

Cost/Description FY 2018 and Follow-On Years:

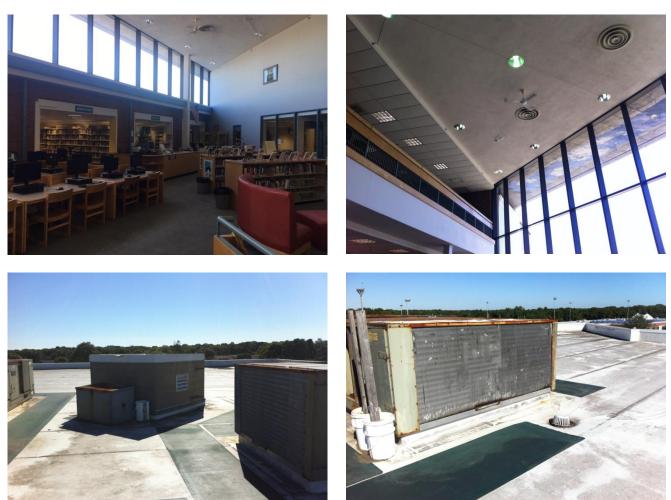
Fiscal Year	Cost	Project Description/Components
2018	\$3,500,363	Design, Engineering, Bidding and Construction

Source of Funding: Capital Trust Fund Bond Issue \$3,158,000 & Transfer Closed Appropriations \$342,363 Counci 2013-105, 2013-106, 2014-092, 2014-093, 2014-096, 2015-045, 2015-115, 2015-116, 2015-119, and 2015-121 (See Part II)

Operating Budget Impact now or in future: HVAC & Curtainwall replacement expected to yield approximately 20% increase in annual energy savings.







Barnstable High School Library Interior and HVAC Units

2018 CIP – School Department General Fund Projects

DEPARTMENT PRIORITY: 5 of 29

2017-064

Project Working Title: Network Infrastructure Upgrades

Project Location: Barnstable Public Schools District-wide

Project Description: The Network Infrastructure Plan is a three (3) year plan that is designed to perform power and data capacity upgrades to the network infrastructure for the entirety of Barnstable Public Schools (BPS). These upgrades are essential to be able to support future Voice over Internet Protocol (VOIP) telephony and security system (security camera, radio frequency identification (RFID) security, etc.) projects. Additionally, included in this plan are labor costs associated with network engineering labor to implement recommended network design changes (from 2016 Harbor Networks Network Assessment), labor and parts to rewire BPS offices at the School Administration Building and the purchase of network monitoring software.

Project Justification: Our existing network switch fabric require data modules and power supply units to support the requirement for additional user endpoints and power requirements to support future initiatives for VOIP and security projects. Without these infrastructure upgrades, we will not be able to proceed with our long range plans to upgrade our phone and security systems.

Impact of Denial/Postponement: Denial of this project will negatively affect our ability to provide much needed improvements to our aging/obsolete security system(s) and limit user access to the district's network.

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	\$250,000	None
	Total Project Cost	\$250,000	None

Basis for Cost Estimates: Harbor Networks Network Assessment and BPS Tech Department equipment assessment and estimates.

Project Estimated Completion Date: 2019 Design & Permit (months) 0 Construction (months) 18

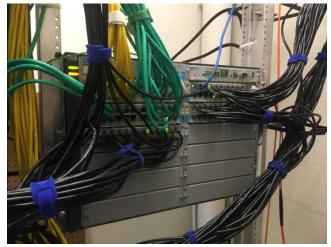
Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018 \$250,000	HP Power Supplies, network modules, power cords, electrical components,	
2018	\$230,000	network engineering, rewired drops & network monitoring.

Source of Funding: School Savings Account \$250,000

Operating Budget Impact now or in future: None







Network Infrastructure

2018 CIP – School Department General Fund Projects

DEPARTMENT PRIORITY: 11 of 29

2017-065

Project Working Title: Communications and Security Network Upgrades

Project Location: Barnstable Public Schools (BPS) District-wide

Project Description: District-wide Upgrade and Design of Existing Phone, Security Camera and Electronic Entry Systems. The current BPS telephony and security system consists of multiple platforms and technologies which are local systems and are not network compatible. The existing systems are older technologies and are becoming increasingly difficult to maintain. This project phase would include technical consultation and engineering to identify system deficiencies, recommend solutions, and develop schedules and costs. System improvements would be performed in following year (s) as required.

Project Justification: The completion of this project provides the district with an enhanced and reliable phone and security system, which is needed to provide necessary protection to our students, staff and community members.

Impact of Denial/Postponement: Denial or postponement of this request negatively affects the safety and security of the district's buildings and occupants.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	\$100,000	None
	Total Project Cost	\$100,000	None

Basis for Cost Estimates: Previous projects and benchmarks.

Project Estimated Completion Date: 2018 Design & Permit (months) 6 Construction (months) 0

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$100,000	System Upgrades

Source of Funding: School Savings Account \$100,000

Operating Budget Impact now or in future: To be determined



Typical DVR/Camera Security System and Current Barnstable High School Phone Switch

DEPARTMENT PRIORITY: 18 of 29

2017-066

Project Working Title: Barnstable Public Schools Asbestos Abatement

Project Location: District-wide

Project Description: Remove known remaining isolated areas of asbestos throughout the district, (crawlspaces, hot water pipes, floor tiles, etc.)

Project Justification: Provide asbestos free learning and work spaces.

Impact of Denial/Postponement: Possible exposure and health risks to staff and students

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	\$300,000	None
	Total Project Cost	\$300,000	None

Basis for Cost Estimates: In-house estimates provided by Asbestos/AHERA Reports

Project Estimated Completion Date: 2019 Design & Permit (months) 3 Construction (months) 24

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$300,000	Asbestos Abatement

Source of Funding: Capital Trust Fund Bond Issue \$300,000

Operating Budget Impact now or in future: N/A



Piping with Asbestos

2018 CIP – School Department General Fund Projects

DEPARTMENT PRIORITY: 1 of 29

2017-067

Project Working Title: Barnstable High School Stadium Bleachers

Project Location: 744 West Main Street, Hyannis, MA 02601

Project Description: Replace existing home side bleachers and add visitor's side bleachers.

Project Justification: Current bleachers are becoming structurally unsound and unsafe. Floor planks are showing signs of fatigue, bolts fasteners and structural members are rusting and deteriorating. Current configuration is not code compliant and due to design and age, retrofitting for compliancy is not possible.

Impact of Denial/Postponement: Poses significant safety hazard and liability for the Town of Barnstable.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	\$75,000	None
	Construction or Acquisition	\$810,000	None
	Project Management	\$40,000	None
	Project Contingency	\$80,000	None
	All Other Costs	\$50,000	None
	Total Project Cost	\$1,055,000	None

Basis for Cost Estimates: Engineering/Fabrication estimates, (CDM Smith & E&D Specialty Stands)

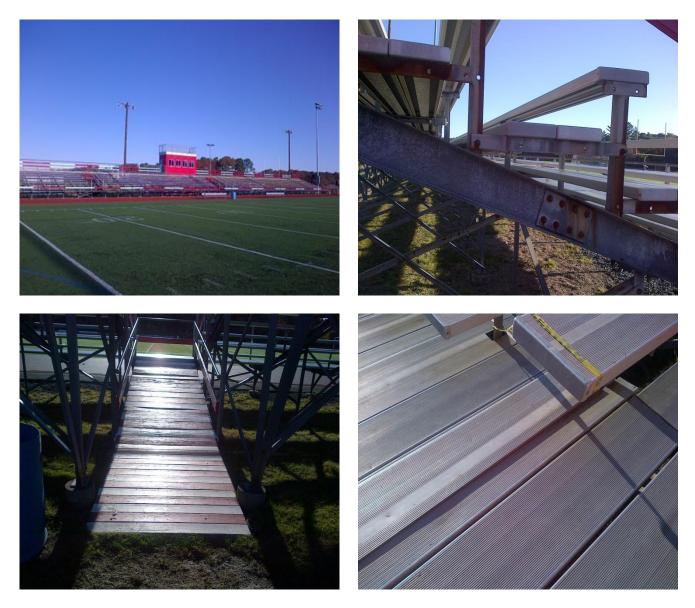
Project Estimated Completion Date: 2018 Design & Permit (months) 6 Construction (months) 6

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$1,055,000	BHS Bleacher Engineering and Construction

Source of Funding: Capital Trust Fund Bond Issue \$1,055,000

Operating Budget Impact now or in future: None



Barnstable High School Stadium Bleachers

DEPARTMENT PRIORITY: 3 of 29 2017-068

Project Working Title: Barnstable High School Cafeteria Storefront and Window Replacement

Project Location: 744 West Main Street, Hyannis, MA 02601

Project Description: Replace existing cafeteria storefront unit

Project Justification: Existing units are failing and becoming inoperable. Side rectangular windows are exhibiting air/water infiltration and original storefront/door assembly is becoming inoperable and creating a safety issue for egress.

Impact of Denial/Postponement: N/A

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	\$15,000	None
	Construction or Acquisition	\$175,000	None
	Project Contingency	\$20,000	None
	All Other Costs	\$15,000	None
	Total Project Cost	\$225,000	None

Basis for Cost Estimates: CBI Engineering Construction costs generated as add alternate bid for previous project (Cafeteria Wall Replacement).

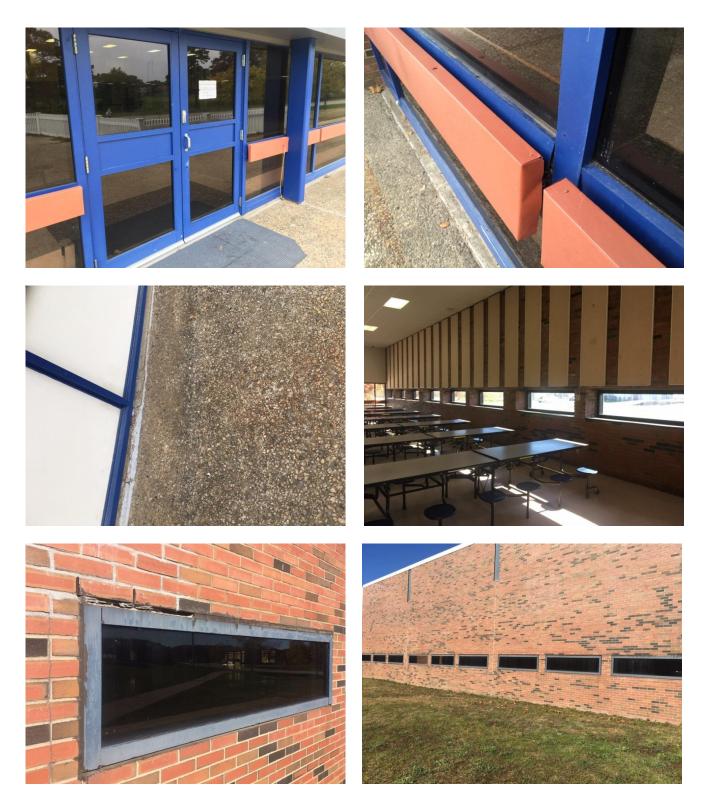
Project Estimated Completion Date: 2017 Design & Permit (months) 2 Construction (months) 4

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$225,000	Construction, Design & Permitting

Source of Funding: Combined Projects Capital Trust Fund Bond Issue \$225,000 + \$200,000 = \$425,000

Operating Budget Impact now or in future: Energy cost savings will be realized by replacing current thermally inefficient window and door assemblies.



Barnstable High School Cafeteria Storefront and Windows

DEPARTMENT PRIORITY: 7 of 29

Project Working Title: Barnstable West Barnstable Roof Replacement

Project Location: 2463 Main Street, West Barnstable, MA 02668

Project Description: Replacement of existing of sloped shingle roof.

Project Justification: Existing roof is at end of life (15 years) and is experiencing blow-offs and leaks.

Impact of Denial/Postponement: Postponement of this project may cause damage to building interior, furniture and educational materials. Localized repair and patching is no longer an effective option since the failure area has expanded to multiple large areas.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	\$20,000	None
	Construction or Acquisition	\$150,000	None
	Project Management	\$15,000	None
	Project Contingency	\$15,000	None
	Total Project Cost	\$200,000	None

Basis for Cost Estimates: Contractor supplied unit rates at \$300/sq

Project Estimated Completion Date: 2017	Design & Permit (months)	3	Construction (months)	3
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Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components	
2018	\$200,000	Shingle roof replacement including engineering, project management and contingency.	

Source of Funding: Combined Projects Capital Trust Fund Bond Issue \$225,000 + \$200,000 = \$425,000

Operating Budget Impact now or in future: Roof replacement will improve energy efficiencies by alleviating current leak and infiltration areas.





Barnstable West Barnstable Roof

Public Works General Fund Projects

PROJECT: PW-18-3

DEPARTMENT PRIORITY: 3 of 45

2017-069

Project Working Title: Town Hall Restroom Renovations

Project Location: 367 Main Street, Hyannis, MA 02601

Project Description: This project continues the work needed to upgrade the existing toilet facilities within the building. This funding request relates directly to public health, safety and code issues that need immediate attention.

Project Justification: The Town Hall is the public image of the Town. The building requires continual upgrades and improvements. The public areas in Town Hall, which include the toilet rooms, are in poor condition and give a negative impression of the Town of Barnstable. In addition, there are limited toilet facilities, much of which does not meet ADA standards. Conditions exist where toilets are limited by gender on specific floor levels. The work of this CIP will correct this problem and bring the Town Hall into compliance.

Impact of Denial/Postponement: The toilet facilities within the building will continue to degrade and require increased maintenance.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	\$55,082	None
	Construction or Acquisition	\$459,016	None
	Project Management	\$22,951	None
	Project Contingency	\$22,951	None
	Total Project Cost	\$560,000	None

Basis for Cost Estimates: In-house and Architect's estimate and studies

Project Estimated Completion Date: 2018 Design & Permit (months) 6 Construction (months) 18

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components	
2018	\$560,000	Design & Construction	

Source of Funding: Capital Trust Fund Bond Issue \$560,000

Operating Budget Impact now or in future: There may be potential savings from decrease water usage from more efficient fixtures.







Town Hall Bathrooms

2018 CIP – Public Works General Fund Projects

PROJECT: PW-18-6

DEPARTMENT PRIORITY: 6 of 45

2017-070

Project Working Title: Town Hall & School Administration Building Masonry Sealer

Project Location: 367 Main Street, & 230 South Street, Hyannis, MA 02601

Project Description: This project protects previously completed masonry restoration work for both the Town Hall and School Administration Buildings (SAB).

Project Justification: The Town Hall is the public image of the Town of Barnstable. Exterior restoration work was completed using Community Preservation Act (CPA) funds, during which masonry sealer was installed to protect the soft brick from water absorption. The masonry on both the Town Hall and SAB buildings is West Barnstable Brick from 1897, which is known to be soft and porous. This masonry coating protects for between 5 and 8 years before the masonry needs recoating.

Impact of Denial/Postponement: Once the life expectancy of the existing masonry coating has passed, the masonry will begin to absorb moisture and deteriorate.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	\$11,000	None
	Construction or Acquisition	\$90,000	None
	Project Management	\$4,000	None
	Project Contingency	\$8,000	None
	All Other Costs	\$3,000	None
	Total Project Cost	\$116,000	None

Basis for Cost Estimates: In-house and Architect's estimate and studies

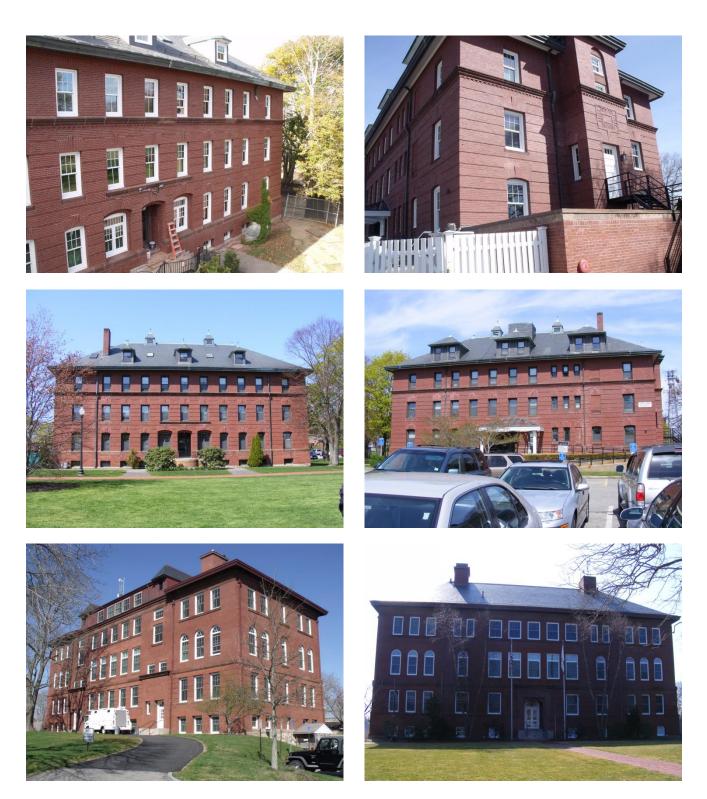
Project Estimated Completion Date: 2018 Design & Permit (months) 4 Construction (months) 4

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$116,000	Design & Construction

Source of Funding: Capital Trust Fund Reserves \$116,000

Operating Budget Impact now or in future: There is no direct operating budget impact but performing this work at the required intervals will result in the preservation of the asset reducing or eliminating future costly repairs.



School Administration Building and Town Hall

PROJECT: PW-18-1

DEPARTMENT PRIORITY: 1 of 45

2017-071

Project Working Title: Public Roads Maintenance

Project Location: Road rehabilitation work, milling and/or repaving of Rolling Hitch Road and Bay Lane in Centerville, Nickerson Road in Cotuit, Mitchell's Way and Megan Road in Hyannis, Osterville - West Barnstable Road in Marstons Mills, Lombard Avenue in West Barnstable, and Sea View Avenue in Osterville. Major drainage improvements are planned for Mitchell's Way in Hyannis. Smaller drainage projects, cracksealing and preventive maintenance are also planned for various roads town-wide (approx. 28 miles) to extend their service life. Associated costs are included in this project.

Project Description: Repairs may include one of several different approaches including full depth reconstruction, asphalt overlay, milling and paving, applying a chipseal surface layer or cracksealing. In addition to surface repairs, projects typically include installation or upgrading of drainage systems, curbing, and sidewalks wherever practicable.

Project Justification: The condition of the Town's road system is deteriorating each year, making maintenance and reconstruction essential to preserve this major capital asset. Analysis performed through the Pavement Management Program shows a current backlog of approximately \$19.2 million of needed public road repairs. This represents a reduction of the \$21 million backlog presented in the FY2016 CIP. In addition, the Town has a backlog of approximately 230 locations where drainage improvements are required to protect public safety and prevent potential property damage.

Impact of Denial/Postponement: The impact of denial or postponement will be accelerated deterioration of our public roadway network resulting in public safety hazards and liability, potential damage to private property, and increased repair costs. One example is the crack seal projects that are proposed; allowing these roads to deteriorate would require more expensive maintenance operations such as milling and placing an asphalt overlay that would cost significantly more than the proposed preventative maintenance.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	\$250,000	\$275,000
	Construction or Acquisition	\$2,252,000	\$2,775,000
	Project Management	\$330,000	\$330,000
	Project Contingency	\$274,000	\$418,250
	All Other Costs	\$144,000	\$26,750
	Total Project Cost	\$3,250,000	\$3,825,000

Basis for Cost Estimates: Cost estimates and locations developed through the Barnstable pavement management system, which includes cost/benefit comparisons for guidance in the selection of projects. Costs calculated based on the level of labor, equipment and materials required to complete the construction. Quantities for individual items calculated based on actual field counts, measurements and observations. Historical cost data and the most current unit rates applied for each item and/or activity to determine estimated costs. Input provided by Highway Division personnel to assist in identification of problematic roadway conditions and recent repair history.

Project Estimated Completion Date: 2018 Design & Permit (months) 12 Construction (months) 12

2018 CIP – Public Works General Fund Projects

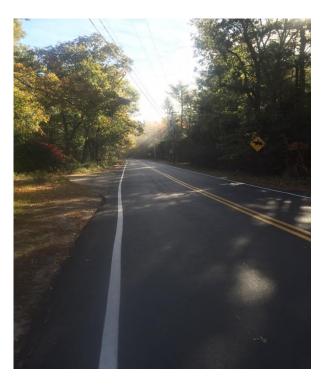
Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components	
2018	\$3,250,000	Planning, analysis, design, construction & construction management	
2019	\$3,825,000	Planning, analysis, design, construction & construction management	
2020	\$3,901,500	Planning, analysis, design, construction & construction management	
2021	\$3,980,000	Planning, analysis, design, construction & construction management	
2022	\$4,059,600	Planning, analysis, design, construction & construction management	

Source of Funding: Capital Trust Fund Reserves \$3,250,000

Operating Budget Impact now or in future: The purpose of this project is primarily to maintain the existing roadway network and reduce the impacts of deferred maintenance on future capital budgets.





Public Roads

PROJECT: PW-18-14

DEPARTMENT PRIORITY: 14 of 45

2017-072

Project Working Title: JFK Museum Plaza Replacement

Project Location: 397 Main Street, Hyannis, MA 02601

Project Description: This project would fund needed replacement of the failing bluestone plaza. These funds would provide for design, demolition, and construction.

Project Justification: The JFK Hyannis Museum is one of the most highly used leased properties owned by the Town of Barnstable. 65,000 people visit the facility over the course of an average year. The existing Bluestone plaza is of low quality stone. The stone is degrading and creating trip hazards. There have been falls by pedestrians at this location due to deteriorated and displaced plaza stones. It is the intent to replace the failing plaza stone with a stamped concrete surface.

Impact of Denial/Postponement: Deferred maintenance of this facility will contribute to its continued deterioration. The potential for legal action against the Town due to injuries will increase.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	\$22,000	None
	Construction or Acquisition	\$179,000	None
	Project Management	\$8,000	None
	Project Contingency	\$26,000	None
	Total Project Cost	\$235,000	None

Basis for Cost Estimates: Architect in-house estimate

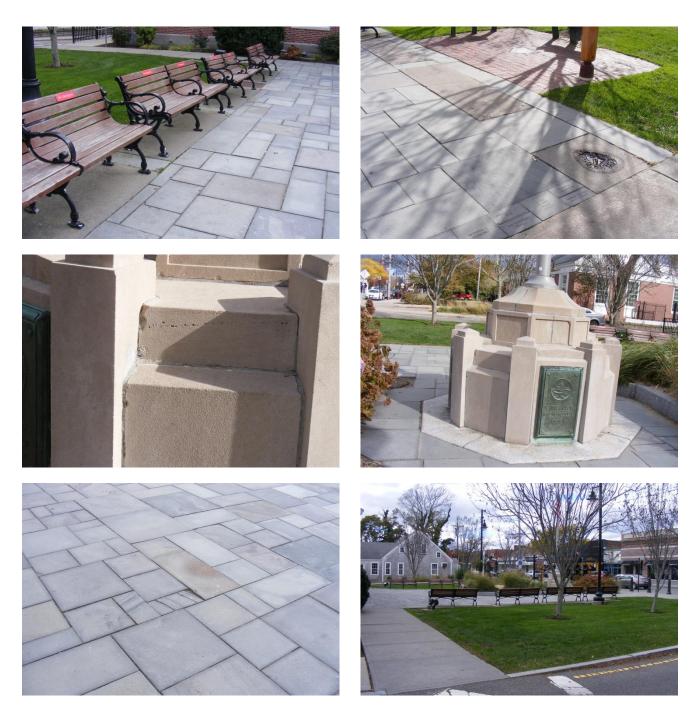
Project Estimated Completion Date: 2018 Design & Permit (months) 6 Construction (months) 6

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components	
2018	\$235,000	Design & Construction	

Source of Funding: Transfer from Closed Appropriations \$235,000 Council Order 2014-101 & 2013-115 (See Part II)

Operating Budget Impact now or in future: It is anticipated that there will be fewer repair work orders for the site.



JFK Hyannis Museum Main Entrance Seating Area

PROJECT: PW-18-2

DEPARTMENT PRIORITY: 2 of 45

2017-073

Project Working Title: Sidewalk Overlay and Guardrail & Cotuit Enhanced ADA Compliant Pedestrian Crossing

Project Location: Town-wide & Ocean View Avenue /Main Street, Main Street /School Street, School Street /High Street Cotuit Village

Project Description: Construction of Americans with Disabilities (ADA) compliant and traffic calming designed pedestrian crossings in Cotuit. In addition, remove and replace 6,000 linear feet of old deteriorated concrete post and steel cable guardrails. Remove old broken asphalt and vegetation within existing footprint of sidewalk. Install a new 1.5" layer of new asphalt.

Project Justification: The ADA compliant intersections to be addressed experience heavy pedestrian usage. Safe and accessible pedestrian crossings are required to enhance the movement of pedestrians. Furthermore, The Town of Barnstable has approximately 9.2 miles of guardrail, much of which does not meet the Manual on Uniform Traffic Control Devices (MUTCD) standards, which is in need of replacing

Impact of Denial/Postponement: The failure to install ADA compliant safe and accessible crossings will result in safety hazards for pedestrians at busy intersections. The lack of updated crossings will discourage pedestrian movements and make the Village less walkable. Curtailing the sidewalk replacement program, we would be at a risk of liability. Accidents resulting in personal injury may occur as a direct result of vehicles leaving the road through an aging guardrail system.

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	\$285,455	\$1,422,000
	Project Contingency	\$28,545	None
	Total Project Cost	\$314,000	\$1,422,000

Basis for Cost Estimates:

Project Estimated Completion Date: 2018 Design & Permit (months) 2 Construction (months) 12

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$314,000	Design and Construction
2019	\$330,000	Design and Construction
2020	\$346,000	Design and Construction
2021	\$364,000	Design and Construction
2022	\$382,000	Design and Construction

Source of Funding: Capital Trust Fund Bond Issue \$314,000

Operating Budget Impact now or in future: This is existing infrastructure, which is already being maintained. This work should reduce the impacts from deferred maintenance on future capital budgets.



Pedestrian Crossing



Sidewalks



After



Pedestrian Crossing



Sidewalks



Before

2018 CIP – Public Works General Fund Projects

PROJECT: PW-18-13

DEPARTMENT PRIORITY: 13 of 45

2017-074

Project Working Title: Barnstable Shooting Range

Project Location: Service Road West Barnstable, MA 02668

Project Description: The first phase includes lead reclamation, reconfiguration, shooting position improvements and safety improvements to the existing cleared shotgun and pistol/rifle ranges. Future phases will include a comprehensive site assessment of the entire range area and remediation of the 5,000 parts per million lead shot area.

Project Justification: The State's lead shot initiative allows gun ranges to operate under an Environmental Stewardship Plan. The Plan for the West Barnstable Shooting Range (Horsley & Witten, 2003) requires the removal of lead on a regular basis. This work has not been accomplished to date. Furthermore, activities at the shooting range over the past five decades have resulted in the presence of lead in soils, that far exceed the DEP's maximum contaminant level of 600 parts per million, over nearly 27 acres.

Impact of Denial/Postponement: Ranges will not be able to open due to non-compliance with the Environmental Stewardship Plan and unsafe conditions.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	\$25,000	\$150,000
	All Other Costs	\$325,000	\$1,400,000
	Total Project Cost	\$350,000	\$1,550,000

Basis for Cost Estimates: N/A

Project Estimated Completion Date: 2020 Design & Permit (months) 2 Construction (months) 4

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$350,000	Lead reclamation, safety improvements
2019	\$350,000	Comprehensive Site Assessment
2020	\$1,200,000	Lead shot are \$5,000 PPM remediation

Source of Funding: Capital Trust Fund Bond Issue \$350,000

Operating Budget Impact now or in future: This project has no impact on the operating budget as the range remains closed. An operating budget for the reopening of the range will be developed in FY18 and brought forward for a funding request when the condition of the range is suitable.

Water Pollution Control Enterprise Fund Projects

PROJECT: WPC-18-1

DEPARTMENT PRIORITY: 1 of 9

2017-075

Project Working Title: Pump Station Evaluations

Project Location: Hyannis, Barnstable Village

Project Description: The Water Pollution Control Division maintains twenty-seven pump stations in the Town of Barnstable. The purpose of this project is to evaluate the structural, electrical, and mechanical components of twenty-two pump of those pump stations. These evaluations will also examine the emergency backup power options for each pump station, the vulnerability of the Town's shoreline pump stations to sea level rise, and the remaining available capacity for each pump station. This study will serve as a road map for future pump station upgrade projects.

Project Justification: The twenty-two pump stations identified for evaluation were built between 1968 and 1993, with an expected 20-year design life. Five stations not being evaluated are newly constructed and in excellent working order. These evaluations will serve as a road map for future improvements that will greatly reduce the likelihood of pump station failure moving forward.

Impact of Denial/Postponement: Denial of this project would leave the Towns pump stations at risk of failure. Failure of a pump station such as the Old Colony Pump station could lead to up to 600,000 gallons per day of sewage overflow into Hyannis Harbor. Failure of other pump stations could lead to sewage backing up into buildings, putting public health at risk. By proactively evaluating and rehabilitating these pump stations the risk of pump station failure is greatly reduced.

Project Cost Estimates:		FY 2018	Future FY
	Evaluation	\$200,000	None
	Total Project Cost	\$200,000	None

Basis for Cost Estimates: Cost estimate provided by consultant.

Project Estimated Completion Date: 2018 Design & Permit (months) 12 Construction (months) 0

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$200,000	Evaluation

Source of Funding: Water Pollution Control Enterprise Fund Reserves \$200,000

Operating Budget Impact now or in future: Future budgetary impacts are yet to be determined, pending the results of the evaluation.



Rendezvous Lane



Bay Shore Road



Old Colony Road



Old Colony Wet Well



Freezer Road Pumps



Kalmus Beach



West Main Street



Oak Neck Road

PROJECT: WPC-18-2

DEPARTMENT PRIORITY: 2 of 9

2017-076

Project Working Title: New ³/₄ Ton Pickup Truck

Project Location: 617 Bearse's Way, Hyannis, MA 02601

Project Description: Purchase of a new ³/₄ ton pickup truck with a utility bed and snowplow attachments.

Project Justification: The Water Pollution Control Division (WPCD) has thirteen employees and only five routine work vehicles. At times, work needs to be scheduled around vehicle availability. By adding a sixth vehicle, WPCD staff will not have to wait until vehicles become available in order to complete necessary tasks. Furthermore, the WPCD is anticipating that the sewer collection system will be expanding in future years, resulting in the need for more work vehicles to perform required maintenance.

Impact of Denial/Postponement: If denied, the WPCD staff will continue to operate with an inadequate amount of vehicles. Certain task will be delayed until vehicles become available.

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	\$55,000	None
	Total Project Cost	\$55,000	None

Basis for Cost Estimates: Estimate provided by DPW Highway Fleet Maintenance

Project Estimated Completion Date: 2018 Design & Permit (months) 0 Construction (months) 1

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$55,000	Purchase of a new ¾ pickup truck

Source of Funding: Water Pollution Control Enterprise Fund Reserves \$55,000

Operating Budget Impact now or in future: Annual maintenance will be performed in-house and the annual operating costs are estimated at \$4,000.



¾ Ton Pickup Truck

PROJECT: WPC-18-3

DEPARTMENT PRIORITY: 3 of 9

Project Working Title: Wastewater Treatment Plant Modeling – Biowin Model

Project Location: 617 Bearse's Way, Hyannis, MA 02601

Project Description: This purpose of this project is to hire a consultant to develop a computerized wastewater treatment plant simulation model for the Hyannis Water Pollution Control Facility. This model will analyze the chemical, biological, and mechanical components of the system. Included in this project is a laboratory sampling program in order to develop and calibrate the model.

Project Justification: Developing a computerized model will allow Water Pollution Control Division (WPCD) staff to better understand how different process components interact with each other, and how to optimize plant performance. The model will account for various types of wastewater loads (sewage, septage, grease) and provide insight as to the best methods of treatment. It will also help to identify areas of limited capacity within the treatment process. The data provided by the model will provide valuable information to engineers designing upgrades to the treatment plant in the future.

Impact of Denial/Postponement: If this project is not approved, the WPCD will continue to operate without the additional information that would be gained from the model. Wastewater treatment plant effluent could potentially be treated to a higher standard, and limitations within the process could go unnoticed.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	\$55,000	None
	Total Project Cost	\$55,000	None

Basis for Cost Estimates: Cost estimate provided by a consultant.

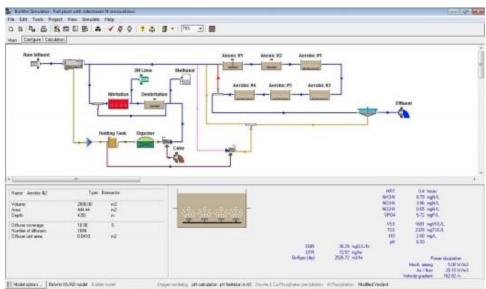
Project Estimated Completion Date: 2018 Design & Permit (months) 12 Construction (months) 0

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$55,000	Consultant to develop a computerized wastewater treatment plant simulation model

Source of Funding: Water Pollution Control Enterprise Fund Reserves \$55,000

Operating Budget Impact now or in future: The model could result in potential savings due to process optimization. This will be identified in the model.



State (Seedy State adultion 5571 (day); 11.05 Ready to simulate 20.0°C 1.0 hours Current adultion ()



Biowin Model Screenshot, Aerial View of Hyannis Treatment Plant

ROJECT: WPC-18-4

DEPARTMENT PRIORITY: 4 of 9

2017-078

Project Working Title: Barnstable Road Sewer Evaluation, Design and Construction

Project Location: Barnstable Road, Hyannis, MA 02601

Project Description: This project funds the evaluation and design of the Barnstable Road sewer system upgrades. Construction of the recommended improvements will occur in conjunction with water department water line improvements in a future fiscal year.

Project Justification: The Water Department's 2007 Master Plan calls for the replacement of 3200 feet of water main, valves, hydrants, and service connections on Barnstable Road. These funds will allow the Water Pollution Control Division (WPCD) to hire a consultant to identify end design improvements to the sewer system on Barnstable Road. Certain stretches of sewer on Barnstable Road are 80 years old and the need to repair these lines is becoming imminent. This project will coordinate these repairs with other utilities in order to save on overall project costs and minimize any inconvenience to the public that would be caused by frequent road openings.

Impact of Denial/Postponement: If denied, the water main replacement would continue as planned, and any sewer repairs would be carried out later, independent of this project. An opportunity to coordinate repairs with other utilities would be lost, meaning more road openings going forward and more disruption to local traffic and businesses in this area.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	\$72,000	None
	Construction or Acquisition	None	\$715,000
	Project Management	None	\$70,000
	Project Contingency	None	\$70,000
	Total Project Cost	\$72,000	\$855,000

Basis for Cost Estimates: In-house estimate

Project Estimated Completion Date: 2019 Design & Permit (months) 12 Construction (months) 0

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$72,000	Evaluation and Design
2019	\$855,000	Construction

Source of Funding: Water Pollution Control Enterprise Fund Reserves \$72,000

Operating Budget Impact now or in future: Normal levels of preventative maintenance would continue with no impact on operating budget or staffing.



Internal View of Pipe Corrosion

2018 CIP – Water Pollution Control Enterprise Fund Projects

Water Supply Enterprise Fund Projects

PROJECT:	W/S_18_1	
PROJECT.	AA2-TO-T	

DEPARTMENT PRIORITY: 1 of 9 2017-079

Project Working Title: Lease Buy-out of (3) Activated Carbon Filter Units - Mary Dunn 1, 2 & 3 Wells

Project Location: 656 Mary Dunn Road, Hyannis, MA 02601

Project Description: Buy-out two (2) existing leases for the filter equipment. One lease agreement with the Calgon Company covering the filter units at the Mary Dunn 1 and 2 wells, another lease agreement with the TIGG Company, covering the filter unit at the Mary Dunn 3 well.

Project Justification: The need for the activated carbon filter units is projected to last at least another five to seven years. The total costs of the leases are approximately \$210,000 per year while the buy-out cost is \$490,840. The payback time is a little more than two years.

Impact of Denial/Postponement: The denial or postponement of this request will impact the operating budget of the DPW Water Supply Division negatively and will cause more financial pressure to increase rates and fees for the Hyannis Water System rate payers.

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	\$491,000	None
	Total Project Cost	\$491,000	None

Basis for Cost Estimates: Buy-out quotes from the two filter companies, Calgon and TIGG.

Project Estimated Completion Date: 2017 Design & Permit (months) 0 Construction (months) 0

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$491,000	Calgon and TIGG filter buy-out

Source of Funding: Water Enterprise Fund Bond Issue \$491,000

Operating Budget Impact now or in future: The operating expense budget will be decreased by \$210,000 for the annual lease payment. This will be partially offset by the new annual loan payment.



Carbon Filter Units

DEPARTMENT PRIORITY: 2 of 9

Project Working Title: Well Reactivation Project

Project Location: Straightway 1 well and Mary Dunn 4 well

Project Description: This well reactivation project is an effort to increase the water production capacity for the Hyannis Water System on an accelerated basis by reactivating the Straightway 1 and Mary Dunn 4 wells.

Project Justification: The combination of recent UCMR3 sampling and testing and the lowering of the Environmental Protection Agency (EPA) health advisory for PFOS / PFOA have resulted in a water production deficiency for the Hyannis Water System. This project will have the ability to add two wells and approximately 1.2 MGD to the system without a lengthy, five-year new well permit process. The same amount of water purchased from Yarmouth was \$4,300 dollars per day.

Impact of Denial/Postponement: The ability to provide the rate payers of the Hyannis Water System with the highest possible water quality will continue to deteriorate and the redundancy of water pumping capacity will diminish.

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	\$240,000	None
	Project Management	\$30,000	None
	Project Contingency	\$25,000	None
	Total Project Cost	\$295,000	None

Basis for Cost Estimates: Previous project's experience.

Project Estimated Completion Date: 2017/18 Design & Permit (months) 8 Construction (months) 12

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$295,000	Construction Straightway 1 & Mary Dunn 4

Source of Funding: Water Enterprise Fund Bond Issue \$295,000

Operating Budget Impact now or in future: This project, if successful, could eliminate the need to purchase water from other water providers saving close to \$1 million in the operating budget.

DEPARTMENT PRIORITY: 3 of 9

Project Working Title: Pipe Replacement and Upgrade Program

Project Location: The drinking water distribution system for Hyannis, Hyannis Port and West Hyannis Port.

Project Description: This is a continuation of a 30-year, phased, pipe replacement and upgrade program for the Hyannis Water System; as recommended by Weston & Sampson Engineering, Inc. in their April 2007 Master Plan.

Project Justification: It is important to implement a structured program to replace and upgrade the water pipes in the distribution system, some of which are over 100 years old. This program is in addition to the routine maintenance and repair program to be performed by the contracted water system operator. The proposed capital budget for this pipe replacement and upgrade program is \$1,050,000 per year, and includes a capitally funded water works project manager to oversee and implement this program. This continuing project will ensure the long-term ability of the Hyannis Water System to provide sufficient drinking water and fire readiness protection for all its customers.

Impact of Denial/Postponement: Water distribution capacity will continue to be less reliable over time, which would limit water supply availability during emergencies, for existing customers, and preclude the ability to accommodate new economic growth.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	\$75,000	None
	Construction or Acquisition	\$425,000	\$4,200,000
	Total Project Cost	\$500,000	\$4,200,000

Basis for Cost Estimates: Previous years' experience

Project Estimated Completion Date: 2018 Design & Permit (months) 4 Construction (months) 8

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$500,000	Design & Construction
2019	\$1,050,000	Design & Construction
2020	\$1,050,000	Design & Construction
2021	\$1,050,000	Design & Construction
2022	\$1,050,000	Design & Construction

Source of Funding: Water Enterprise Fund Reserves Bond Issue \$500,000

Operating Budget Impact now or in future: The upgrades will be to the existing distribution piping which are already maintained by the DPW. Replacing these pipes will likely result in less maintenance cost and should not result in the need for additional personnel.







Pipe Replacement

2018 CIP – Water Supply Enterprise Fund Projects

Project Working Title: Wells, Pump Stations, Treatment Plant Repair & Upgrade Program

Project Location: Existing wells, pumping stations, and treatment facilities Hyannis Water System.

Project Description: This CIP is a continuation of the repairs and upgrades program started in FY2007. With the exception of the Straightway well #2, all of the wells were constructed in the early to mid-1970. The prior year's monies were used to install emergency generators, lighting, and fencing and implement pavement improvements. Starting in FY2014 the Hyannis Water Board approved the recommendation to implement a structured rehabilitation program dealing with major facility components needing upgrades or replacements. These facility components and cost allocations are: \$45,000 for buildings, \$40,000 for process control equipment, \$40,000 for safety and security components, and \$45,000 for electrical equipment. Project management and oversight will be provided by a project engineer, partially funded out of this program in the amount of \$30,000.

Project Justification: It is appropriate to implement a structured program to repair and upgrade the wells, pump stations and treatment facilities as many of these components are approximately 40 years old. This program is in addition to, and may supplement, the routine maintenance program to be performed by the contracted water system operator.

Impact of Denial/Postponement: Water supply and pumping capacity will become less reliable over time, thus limiting water supply availability for all customers and during emergencies.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	\$20,000	\$80,000
	Construction or Acquisition	\$141,500	\$566,000
	Project Management	\$30,000	\$120,000
	Project Contingency	\$8,500	\$34,000
	Total Project Cost	\$200,000	\$800,000

Basis for Cost Estimates: Previous years' experience

Project Estimated Completion Date: 2018 Design & Permit (months) 2 Construction (months) 10

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$200,000	Design & Construction
2019	\$200,000	Design & Construction
2020	\$200,000	Design & Construction
2021	\$200,000	Design & Construction
2022	\$200,000	Design & Construction

Source of Funding: Water Enterprise Fund Reserves \$200,000

Operating Budget Impact now or in future: The upgrades will be to the existing well buildings, treatment and other facilities which are currently maintained by the DPW. Some operating budget savings may be realized by replacing existing equipment with more energy efficient equipment, and a reduction in maintenance cost.

2018 CIP – Water Supply Enterprise Fund Projects





Upgrade Pump Stations

2018 CIP – Water Supply Enterprise Fund Projects

PROJECT: WS-18-5

DEPARTMENT PRIORITY: 5 of 9

2017-083

Project Working Title: Water Storage Tank (Mary Dunn 1) New roof, appurtenances & site work construction

Project Location: 1230 Mary Dunn Road, Barnstable, MA 02630

Project Description: Construction of a new foundation repair, climbing ladder, and overflow rehabilitation on the Mary Dunn 1 water storage tank. Repairs and upgrades will also be made to the security fencing, gates and access road. These requested monies are for construction services.

Project Justification: This project was recommended by Weston & Sampson Engineering, Inc. in their April 2007 Master Plan. A detailed tank evaluation was done in July 2015 by Weston & Sampson Engineers, Inc. based on inspections by Merithew / Utility Services Corporation, which resulted in this proposed work.

Impact of Denial/Postponement: The sanitary safety and security of the Mary Dunn 1 water tank could get compromised due to the deteriorating wood roof planking, trusses and rolled roofing.

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	\$533,700	None
	Project Management	\$45,000	None
	Project Contingency	\$59,300	None
	Total Project Cost	\$638,000	None

Basis for Cost Estimates: Cost estimates by various engineering firms.

Project Estimated Completion Date: 2018	Design & Permit (months) 0	Construction (months)	18
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Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components	
2018	\$638,000	Construction	

Source of Funding: Water Enterprise Fund Bond Issue \$638,000

Operating Budget Impact now or in future: Funding this project will reduce future capital costs associated with deferred upgrades.



Mary Dunn 1 Ladder and Roof

PROJECT: WS-18-6

DEPARTMENT PRIORITY: 6 of 9

2017-084

Project Working Title: New pickup truck

Project Location: Hyannis Water System

Project Description: The purchase of a new pickup truck.

Project Justification: The existing Water Division truck is a 1999 Ford pickup truck with approximately 153,000 miles. This seventeen-year-old truck was part of the asset acquisition from the Barnstable Water Company by the Town in 2005. The DPW Fleet manager has stated that the truck is badly corroded and will not be able to receive an inspection sticker. He recommends replacement.

Impact of Denial/Postponement: The Water Supply Division will likely be without a valuable vehicle, which will impact operations.

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	\$45,000	None
	Total Project Cost	\$45,000	None

Basis for Cost Estimates: New truck quote obtained via the DPW Fleet manager.

Project Estimated Completion Date: 2017 Design & Permit (months) 2 Construction (months) 0

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components	
2018	\$45,000	Acquisition of the new truck	

Source of Funding: Water Enterprise Fund Reserves \$45,000

Operating Budget Impact now or in future: There is no operating budget impact as this is replacing an existing vehicle that will more likely than not need significant repairs in the near future.



1999 Ford pickup truck

2018 CIP – Water Supply Enterprise Fund Projects

Golf Course Enterprise Fund Projects

PROJECT: GOLF-18-2

DEPARTMENT PRIORITY: 2 of 4

2017-085

Project Working Title: Hyannis Golf Course Turf Maintenance and Equipment Replacement

Project Location: 1800 Iyannough Road (Route 132), Hyannis MA 02601

Project Description: Replace several key pieces of turf maintenance equipment. (2-green mowers, 2-tee mowers, 2-fairway mowers, 1-large area rough mower and 1-intermediate area rough mower)

Project Justification: All lawn maintenance equipment is 10 years old and past their useful life expectancy.

Impact of Denial/Postponement: The equipment is in poor condition and experiencing frequent breakdowns. Repair and maintenance costs have skyrocketed. Postponing the acquisition will lead to excessive and costly repairs.

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	\$325,000	None
	Total Project Cost	\$325,000	None

Basis for Cost Estimates: In-house architect estimate

Project Estimated Completion Date: 2018	Design & Permit (months)	0	Construction (months)	0
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Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components	
2018	\$325,000	Acquisition	

Source of Funding: Golf Enterprise Fund Bond Issue \$325,000

Operating Budget Impact now or in future: Replacing older equipment will save approximately \$5,000 in annual maintenance costs.



Lawn Maintenance Equipment

Community Services General Fund Projects

DDOJECT	00D 40 4
PROJECT:	CSD-18-4

DEPARTMENT PRIORITY: 4 of 18

2017-086

Project Working Title: Osterville Recreation Building Design & Construction

Project Location: 93 First Avenue, Osterville, MA 02655

Project Description: Demolition of existing buildings and construction of a new recreation building and recreation fields.

Project Justification: The existing recreation building and the former Osterville Bay Elementary School have reached the end of their useful life and are beyond repair. Funds were appropriated in FY17 for demolition of the buildings. This request begins the process of designing improvements for the new facility. Parking is inadequate as the building and grounds are heavily used. The existing ball field has deep holes and ruts and is at the end of its useful life.

Impact of Denial/Postponement: The public will continue to use a worn out, leaking, inadequate facility.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	\$640,000	None
	Construction or Acquisition	None	\$6,589,690
	Project Management	\$35,000	\$390,000
	Project Contingency	\$334,000	\$753,314
	All Other Costs	\$100,000	\$309,265
	Total Project Cost	\$1,109,000	\$8,042,269

Basis for Cost Estimates: In-house and professional estimates

Project Estimated Completion Date: 2022 Design & Permit (months) 8 Construction (months) 18

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$1,109,000	Architectural, Engineering, Landscape Design, Testing
2019	None	
2020	\$8,042,269	Construction

Source of Funding: Capital Trust Fund Bond Issue \$675,000 & Community Preservation Fund \$434,000

Operating Budget Impact now or in future: Funding for the design portion of this project will include estimates of operating costs for the new fields and building.



Arial View of Osterville Park

2018 CIP - Community Services General Fund Projects

PROJECT: CSD-18-1

DEPARTMENT PRIORITY: 1 of 18

2017-087

Project Working Title: Barnstable Senior Center Stand-by Generator

Project Location: 825 Falmouth Road, Hyannis, MA 02601

Project Description: Installation of a new stand-by generator at the Senior Center to handle the electrical demands during a power outage.

Project Justification: Being able to operate the Senior Center during power outage conditions with back-up power is very important as many seniors seek shelter during inclement weather. An emergency generator at the Senior Center would also allow for the safe evacuation of the Adult Supportive Day clients whose space is located in the Garden (lower) Level of the Senior Center. When there is a power outage, the staff must escort the clients, most of who have cognitive and/or mobility impairments, through a long, winding and steep pathway to reach the main level of the building. Having an emergency generator onsite would allow power to be restored so the elevator and lights would be functional, thereby ensuring the safety of all users of the facility. The Hyannis Fire Department has recommended the installation of the generator during Senior Center annual safety inspections.

Impact of Denial/Postponement: The facility will continue to operate without power during storm events and services cannot be delivered in time of need.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	\$20,760	None
	Construction or Acquisition	\$207,480	None
	Project Management	\$10,380	None
	Project Contingency	\$10,380	None
	Total Project Cost	\$249,000	None

Basis for Cost Estimates: In-House estimate

Project Estimated Completion Date: 2018 Design & Permit (months) 6 Construction (months) 6

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$249,000	Design & Construction

Source of Funding: Capital Trust Fund Reserves \$154,000, Community Development Block Grant (CDBG) \$40,000, and Transfer from Closed Appropriations \$55,000 Council Order 2014-101 (See Part II)

Operating Budget Impact now or in future: Annual testing and maintenance should amount to less than \$1,000.



Senior Center and Stand-by Generator

Police Department General Fund Project

PROJECT: POL-18-2

DEPARTMENT PRIORITY: 2 of 2

Project Working Title: Barnstable Police Department Dispatch Center Renovation

Project Location: 1200 Phinney's Lane, Hyannis, MA 02601

Project Description: The dispatch center console furniture and equipment will be removed and replaced with furniture and equipment that meets current industry standards. The current dispatch console will be replaced with custom-made console and infrastructure storage. The carpeted flooring will be replaced by a commercial grade vinyl floor. The computer systems will be replaced with systems that meet the current industry standards, including additional larger monitors and upgraded technology. The chairs for the four workstations will be replaced with four new commercial grade dispatch chairs designed for 24/7 use.

Project Justification: The existing dispatch room was designed and built in 1981. Over the years, much of the equipment in the room has become obsolete and unused, which is problematic as the console was specifically built for these systems. The existing standards have dispatchers using computers to do their work, yet there is no workspace to accommodate these computer systems. The monitors are placed on top of the old consoles, which places a strain on the operator as they are constantly looking up to complete work. This poor design has resulted in one documented workplace injury already and is the source of many workplace complaints. The carpet in the room is in very poor condition as it is covered with spill stains and is soiled from overuse. The completion of this renovation will bring the room up to the standards that are common in most departments across the Cape.

Impact of Denial/Postponement: The police dispatchers will continue working with poor outdated failing equipment. The space will continue to provide a poor work environment and result in continued physical strain on workstation users. Complaints are often communicated to supervisors, and contribute to deteriorating morale.

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	\$135,000	None
	Project Management	\$10,000	None
	Project Contingency	\$13,000	None
	Total Project Cost	\$158,000	None

Basis for Cost Estimates: In-house Estimate

Project Estimated Completion Date: 2018 Design & Permit (months) 2 Construction (months) 2

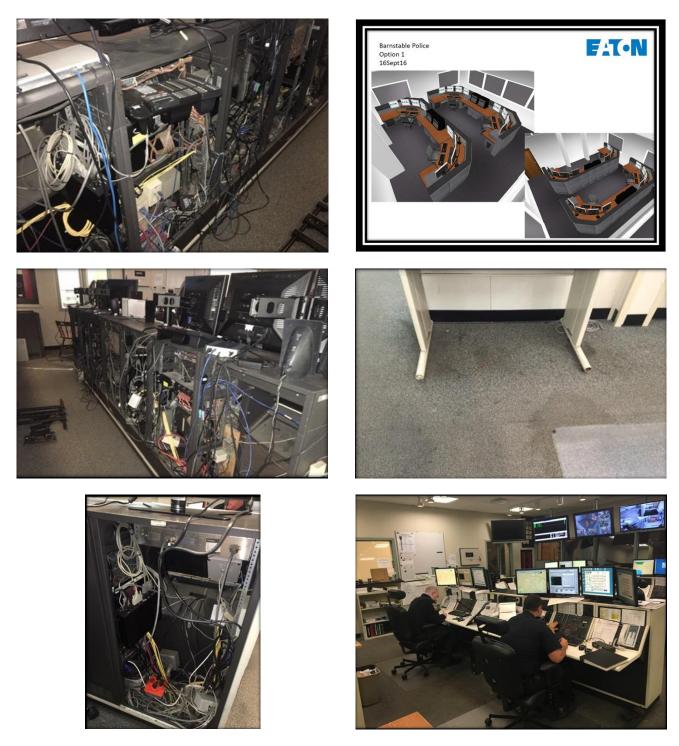
Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$158,000	Design & Construction

Source of Funding: Capital Trust Fund Reserves \$158,000

Operating Budget Impact now or in future: This project is to stabilize an existing Town building and would require a marginal increase in utility costs.

2018 CIP – Police Department General Fund Project



Barnstable Police Department Dispatch Center

Regulatory Services General Fund Projects

PROJECT: RSD-18-1

DEPARTMENT PRIORITY: 1 of 1

2017-089

Project Working Title: Hydrilla Control – Mystic Lake, Middle Pond, and Long Pond (Centerville)

Project Location: Mystic Lake and Middle Pond, Marstons Mills and Long Pond, Centerville

Project Description: Perform whole lake Sonar herbicide treatment to control the hydrilla, a relentless aquatic invasive weed, in Long Pond, Centerville. Perform a whole lake liquid Sonar (AS and Genesis) treatment at Mystic Lake and an area specific liquid Sonar (AS and Genesis) treatment in Middle Pond, Marstons Mills (3-5 acres) to continue to control expanding pioneer growth of hydrilla. Conduct DASH, diver hand-pulling and benthic barrier deployment to supplement the liquid Sonar treatment in the three waterbodies if determined it is needed. In addition, multiple aquatic vegetation surveys of the non-native hydrilla and dominant native plant growth in Long Pond, Mystic and Middle Pond will be completed.

Project Justification: We have determined that hydrilla treatment will be an on- going process. We enjoyed a two-year period (2013 and 2014) where we did not have to treat Long Pond, Centerville, however the hydrilla did return. It is important to use Sonar if we do not want hydrilla to get out of control. Sometimes a combination of mechanical and aquatic herbicide is necessary to combat this relentless aquatic invasive weed.

Impact of Denial/Postponement: Take-over of subject ponds and other Town lakes and ponds by hydrilla, and a much greater cost of control. Recreational affects fishing, boating and swimming.

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	\$82,000	\$372,000
	Total Project Cost	\$82,000	\$372,000

Basis for Cost Estimates: Prior experience with hydrilla control projects. Contact with Keith Gazaille of Solitude Lake Management

Project Estimated Completion Date: 2017 Design & Permit (months) 0 Construction (months) 12

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$82,000	Hydrilla control
2019	\$93,000	Hydrilla control
2020	\$93,000	Hydrilla control
2021	\$93,000	Hydrilla control
2022	\$93,000	Hydrilla control

Source of Funding: Capital Trust Fund Reserves \$82,000

Operating Budget Impact now or in future: None.



Hydrilla in Long Pond Centerville

Airport Enterprise Fund Projects

PROJECT: AIR-18-1

DEPARTMENT PRIORITY: 1 of 15

2017-090

Project Working Title: Obstruction Mitigation Plan and Airspace Analysis

Project Location: 480 Barnstable Road, Hyannis, MA 02601

Project Description: All airports need to manage their surrounding obstructions that exist near the airfield. The last time an analysis was completed was approximately 15 years ago and development along with tree growth has continued to occur through the years. An airspace analysis would bring in data to determine which obstructions would require either removal or some type of mitigation. The resulting obstruction mitigation plan and vegetation management plan will allow the airport to strategically formulate a process to correct known obstructions.

Project Justification: The Federal Aviation Administration (FAA) Safety Regulations (specifically FAR Part 77 and FAA FAR Part 139) and standards require that airspace Protection Zones (PZs) must be achieved and maintained in order to assure an appropriate level of safety at each airport, and to maintain eligibility for Federal grant funds. PZs are crucial elements of aviation and public safety because when maintained they ensure unobstructed flight paths and views for pilots, air traffic controllers, and ground crew, enabling safe takeoffs, landings, and ground movements. The failure to keep these protection zones clear of penetrating vegetation results in a direct increase of risk to pilots and passengers due to the increased potential for a plane crash during takeoff or landing. In addition, compliance with FAA regulations, orders, and advisories is necessary for eligibility for federal funding for airport maintenance and improvement projects. In addition to the need for a recent Airspace Analysis, the Barnstable Municipal Airport (HYA) has completed various projects to remove trees and shrubs from airport property; however, a comprehensive Airport Vegetation Management Plan (VMP) has not been accomplished at HYA to identify vegetation penetrations and future vegetation removal.

The purpose of a VMP is to identify the airport's PZ's and any existing object penetrations within those PZs through an Airspace Study. Once the Airspace Study identifies penetrations, a mitigation plan and/or clearing plan, clearing of penetrations and subsequent Yearly Operational Plans (YOPs) can be developed to identify future clearing and maintenance of the VMP treated areas (typically three to five yearly operational plans following initial vegetation removal).

The vegetation management process at airports has become well defined in the Commonwealth (15 of the 36 public-use airports in the Commonwealth have completed VMPs), and follows a regular, predictable path with regard to methods of vegetation removal and management, identification of target vegetation, and identification of sensitive resources and alternative methods of removal with respect to those sensitive resources. Through the VMP process, a short-term cutting plan, long-term maintenance plan, and monitoring plan will be identified.

Impact of Denial/Postponement: Denial will continue to affect the airport's ability to meet FAA regulations and standards requiring the mitigation and/or clearing of Protection Zones (PZs). This will affect the airport's ability to assure an appropriate level of safety is maintained for unobstructed flight paths and views for pilots, air traffic controllers, and ground crew, enabling safe takeoffs, landings, and ground movements. Postponement will jeopardize eligibility for federal and state funding for airport maintenance and improvement projects.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	\$345,000	None
	Total Project Cost	\$345,000	None

Basis for Cost Estimates: Prior VMP and Airspace Analysis projects completed at other airports in Massachusetts, engineering consultant estimates, industry cost estimates, and FAA and MassDOT consultations.

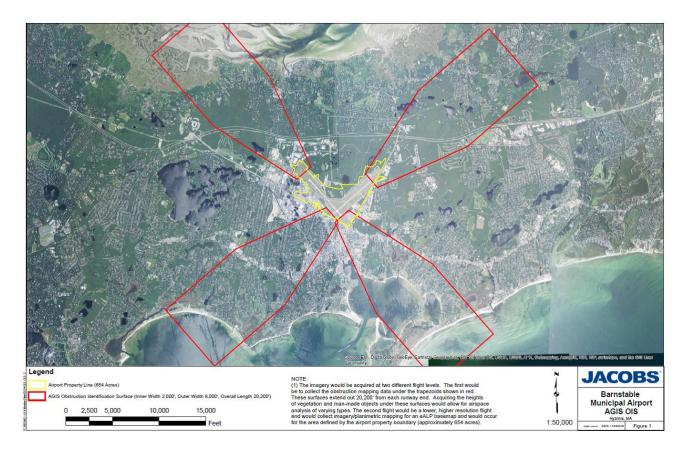
Project Estimated Completion Date: 2018 Design & Permit (months) 6 Construction (months) 0

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$345,000	Complete the Airspace Analysis and Plans

Source of Funding: Airport Enterprise Fund Reserves \$17,250, FAA AIP reimbursable Grant funds at 90% & MassDOT at 5%; BMA at 5% \$327,750. Potential for inclusion of the VMP portion within a MDOT Statewide Program.

Operating Budget Impact now or in future: This will be included as part of the analysis to be performed.



Airports Geographic Information System (AGIS) Obstruction Identification Surfaces

PROJECT: AIR-18-2

DEPARTMENT PRIORITY: 2 of 15 2017-091

Project Working Title: Comprehensive FAA Airport Layout Plan/FAA Master Plan Update including Underground GIS Utilities Survey; Runway 15/33 Safety Enhancements and Improvements; Taxiway Echo Reconstruction; Engineered Material Arresting System (EMAS) Replacement

Project Location: 480 Barnstable Road, Hyannis, MA 02601

Project Description: The Airport's required Federal Aviation Administration (FAA) Airport Layout Plan (ALP) and Master Plan (per FAA Advisory Circular AC150/5070-6) is a comprehensive long-term plan for the airport development that should be revisited and updated periodically, particularly upon completion of the Town and Cape Cod Commission mandated Master Plan and Development Agreement process. Development items that improve an airport for the primary purpose of accommodating aircraft operations would also be included in the update and are considered to be "capacity projects," which would include the possible safety enhancements and improvements by the extension of Runway 15/33 by approximately 926 feet to provide a better margin of safety for regional and longer range private and commercial jet aircraft; and to determine the potential need for Terminal expansion to accommodate use of jetways for larger air carrier aircraft using this airport.

In addition, this planning process will be done in concert with the Airport's utilities infrastructure systems plan that will incorporate all utilities that were originally built in the 1940's and have been upgraded multiple times over the subsequent decades. There is a need to collate all historic construction and engineering data into a comprehensive database, with controlled GIS surveys of above and belowground systems. This project will include the survey and data collection of all runway, taxiway, apron and airfield utilities, including landside utilities for all buildings, parking facilities, and access roads onto a comprehensive GIS database, compatible with FAA and Town needs.

The planning will also consider the possible realignment and reconstruction of Taxiway Echo and the aircraft maintenance run-up pit; and the possible replacement of the existing circa 2003-engineered materials arresting system (EMAS) which is deteriorating.

Project Justification: The present FAA Airport Master Plan does not appear to be complete and should be completely updated to bring the Airport into full FAA compliance. Recent development at the airport includes Taxiways Alpha and Charlie realignment and reconstruction to correct pavement geometry standards, the completion of a new fuel farm facility, the new airfield solar array, and so forth. The Airport Layout Plan and other required portions of the Plan are kept up-to-date; however, a comprehensive airport layout plan does not appear to have been brought up to date for many years and will help in identifying future development in coordination with the FAA for funding the identified and approved future projects.

The availability of space at the departure end of Runway 33 to possibly extend the existing runway by up to 926 feet, and still maintain minimum runway safety margins is feasible and should be comprehensively reviewed. The primary purpose for such an extension would be to provide safety enhancements and improvements by additional runway length to safely accommodate larger, heavier and longer flight range private, regional and commercial turbine (jet) aircraft. The extra landing and take-off distance afforded to aircraft by the runway extension, provides an increased margin of safety for such flight operations.

The new airport terminal building commenced operations in 2011. Due to budgetary constraints, the original design was considerably reduced and certain aspects were eliminated that would have better accommodated larger air carrier aircraft already beginning to use the airport. The future needs of these aircraft would be studied and planned within the context of the updated FAA Master Plan and would include the potential for a

2018 CIP - Airport Enterprise Fund Projects

larger terminal and associated jetways, larger security and baggage handling facilities, larger passenger waiting rooms and so forth, if found to be necessary.

The airfield underground communications and utility systems are not adequately researched or surveyed, which leads to accidental utility damage despite efforts to adequately identify and locate them prior to any construction. This project will reduce hazards and risks during reconstruction of airport projects, and reduce engineering and potential repair costs in the future.

Taxiway Echo is potentially in need of reconstruction (last done circa 1980, with a pavement condition index rating of 59) and realignment to comply with ongoing FAA safety area standards, to correct deficiencies within the runway environment; and to correct other miscellaneous related airfield improvements. A PCI of 55 to 70 requires complete major rehabilitation. The engine maintenance run-up pit must be maintained and upgraded for noise abatement purposes.

The Runway 6-24 engineered material arresting system (EMAS) was constructed in 2003 to prevent concerns related to aircraft overshoots on runways that do not meet FAA Runway Safety Area (RSA) requirements. This is a "first generation" system with a projected 10-year lifespan. Following an inspection, a portion of the EMAS system was upgraded in 2013. Since that time the system appears to be deteriorating at a faster than normal rate. This plan will address that issue to determine if it is cost effective to continue with further repairs and upgrades or if an entirely new system must be installed.

Impact of Denial/Postponement: To deny or postpone funding of this capital project will not allow the Airport to be in full compliance with FAA directives that may have long-term financial consequences with regard to completion of identified future projects, and the receipt of FAA and MassDOT grants. Failure to extend the runway will increase the risk of flight accidents with existing aircraft using the Airport, and will have a negative impact on the ability to safely handle additional private, charter and scheduled airline service. The lack of a utilities plan will have safety consequences with regard to airport operations and future construction activities. Failure to realign and rehabilitate Taxiway Echo will have long-term safety effects and will jeopardize our continued compliance with FAA safety directives, and pose an increased risk of runway incursions. Failure to inspect and repair/replace the EMAS system will have serious flight safety concerns and may cause the loss of air carrier service to the airport, and the airport would not be in compliance with FAA safety directives.

Project Cost Estimates:		FY 2018	Future FY
	Project Management	\$700,000	None
	Total Project Cost	\$700,000	None

Basis for Cost Estimates: Planning and engineering consultant estimates, and FAA and MassDOT consultations.

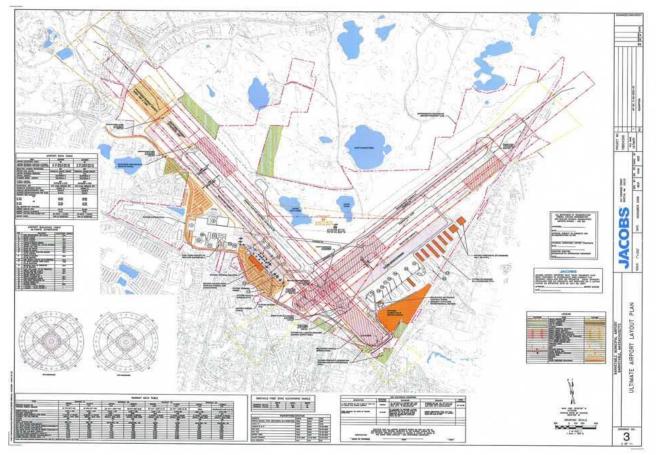
Project Estimated Completion Date: 2018 Design & Permit (months) 0 Construction (months) 6

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$700,000	Commence Planning Project

Source of Funding: Airport Enterprise Fund Reserves \$35,000, FAA Airport Improvement Project (AIP) reimbursable Grant funds at 90% & MassDOT at 5%; BMA at 5% \$665,000

Operating Budget Impact now or in future: This project has no direct impact on future operating budgets.



Advanced Learning Plan (ALP) document.

PROJECT: AIR-18-3

DEPARTMENT PRIORITY: 3 of 15

2017-092

Project Working Title: Airport Access Control and Security Improvements

Project Location: 480 Barnstable Road, Hyannis, MA 02601

Project Description: The Barnstable Municipal Airport has a security program approved by the Transportation Security Administration (TSA) under Part 1542 of 49CFR Chapter XII; and as such is required to provide approved airport security measures over designated portions of the airport including the airport perimeter; in areas where passengers are enplaned or deplaned; where baggage is sorted, loaded and unloaded; and includes any adjacent areas that are not separated by other adequate security measures. Access to all entry control points to all of the aforementioned areas must be controlled by approved access control systems of various degrees of technology to prevent any penetration into secure areas, including state of the art surveillance cameras, recording systems, fiber optics and/or cloud-based connectivity, and so forth. At this time, by adding several layers of security, the industry standard has moved forward by utilizing dual prong control which uses an access control proxy card ID and either a key pad or biometrics (fingerprint, palm print or retina scan), and the use of trained, qualified, and certified personnel. This project will be Phase 2 of this continuing effort.

Project Justification: The Barnstable Municipal Airport (BMA) needs to continue to exponentially upgrade such access control security measures throughout the airport to provide consistent standardized high quality systems; and to prevent breaches of security. Each of the potential enhancements must be approved by the TSA Federal Security Director and included in the TSA approved Airport Security Plan. In addition, all airport personnel are trained to monitor all aspects of airport security, including the use of the Barnstable Police Department on the airfield, and random inspections by TSA Inspectors. We are constantly upgrading systems to improve security and meet reporting requirements of the TSA. Violations of any aspect of the airport security plan are reported immediately to the TSA and may have impact on the National Airspace System.

Impact of Denial/Postponement: Airport security may be breached and have a negative impact on the National Airspace System; may provide opportunities for terrorism incidents; and may lead to fines being imposed on the Airport or any entity found responsible for a breach in security.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	\$75,000	None
	Construction or Acquisition	\$670,000	None
	Total Project Cost	\$745,000	None

Basis for Cost Estimates: N/A

Project Estimated Completion Date: 2018 Design & Permit (months) 3 Construction (months) 3

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$745,000	Design and Construct

Source of Funding: Airport Enterprise Fund Reserves \$37,250, FAA Airport Improvement Project (AIP) reimbursable Grant funds at 90% & MassDOT at 5%; BMA at 5% \$707,750 approved by the TSA FSD.

Operating Budget Impact now or in future: To be determined

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PROJECT: AIR-18-4

DEPARTMENT PRIORITY: 4 of 15

2017-093

Project Working Title: Clear Vegetation and Obstruction Removal along the Airport Perimeter Fence Line Buffer Zone and in FAA Airspace (Part 77) Offending Areas

Project Location: 480 Barnstable Road, Hyannis, MA 02601

Project Description: Design, permit and clear vegetation that has regrown along most of the Airport perimeter fence line buffer zone creating potential Transportation Security Administration (TSA) security violations; and in places where the vegetation has regrown in certain areas of the airfield where it is creating an airspace flight obstruction – sometimes called an Federal Aviation Administration (FAA) FAR Part 77 airspace obstruction or an offending area.

Project Justification: The existing perimeter fence line was installed in phases over many years to first meet FAA airfield and flight safety requirements and then subsequent to the September 11, 2001 terrorist incident, the TSA has required all FAA FAR Part 139 airports to have a security fence along the entire perimeter that is 8 feet tall with three strands of barbed wire along the top, with a 10-foot clear buffer zone on each side of the fence line if possible. Over the past 12 years, the vegetation has continued to grow back along the entire fence line creating a safety and security concern. The airport continues to manually attempt to keep the growth off and away from the fence, without the use of herbicides, with existing personnel, and with the use of AmeriCorps volunteers, JTEC volunteers, and temporary employees. We cannot keep up with the vegetation without this project. The Airport encompasses 683 acres of land, more or less. The results of a new land survey also identified the perimeter length and associated fence line.

Impact of Denial/Postponement: Denial will continue to affect airport personnel's ability to keep the fence line clear of vegetation; it will increase the maintenance workload on a limited staff; it will increase the probability of incurring a security violation from the TSA; and it will increase the probability of an adverse effect on flight minimum altitudes and negatively affect flight safety and commerce.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	\$30.000	None
	Construction or Acquisition	\$270,000	None
	Total Project Cost	\$300,000	None

Basis for Cost Estimates: Prior construction projects, engineering consultant estimates, industry cost estimates, and FAA and MassDOT consultations, etc.

Project Estimated Completion Date: 2019 Design & Permit (months) 6 Construction (months) 12

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$300,000	Design, Permitting and Clearing

Source of Funding: Airport Enterprise Fund Reserves \$15,000, FAA Airport Improvement Project (AIP) reimbursable Grant funds at 90% & MassDOT at 5%; BMA at 5% \$285,000

Operating Budget Impact now or in future: Routine maintenance will continue unabated to maintain the clear zones. This project will prevent a future increase in annual maintenance, which cannot be managed by existing staff levels.

2018 CIP - Airport Enterprise Fund Projects



Fence line and fence vegetation photos and latest 2016 aerial airport layout photo

PROJECT: AIR-18-5

DEPARTMENT PRIORITY: 5 of 15

2017-094

Project Working Title: Runway and Taxiway Markings and Airport-Owned Roadways Annual Painting Contract

Project Location: 480 Barnstable Road, Hyannis, MA 02601

Project Description: Airport Runway and Taxiway Markings require annual operational and maintenance painting in order to meet FAA 14 CFR Part 139 Inspection requirements to maintain the Airport FAA Certification. In addition, all Airport-owned roadways require annual maintenance painting for roadway and pedestrian safety. This project combines both recurring painting requirements into one annual recurring contract.

Project Justification: The Barnstable Municipal Airport (BMA) runways and taxiways are subject to a lot of heavy aircraft use during the year, including snow plowing. The paint is a special FAA approved paint with imbedded reflective material to provide high visibility during reduced weather visibility and night time flight operations. The paint degrades significantly during the year and must be repainted to meet FAA specifications on an annual basis. The paint is inspected annually by the FAA as part of the annual FAA 14 CFR Part 139 airport certification process and must meet minimum standards. During the June 2015 inspection, our runway markings were deemed to be a discrepancy due to substantial paint chipping and worn away markings and had to be repainted on an annual basis to maintain their reflectivity. This used to be accomplished through the use of a MassDOT Aeronautics "state-wide" painting contract. Unfortunately these "state-wide" contracts through the use of MassDOT funds cannot be counted upon on an annual basis to meet our mandated FAA markings requirements. For capital planning purposes, the entire airport must be completely repainted on an annual basis until a different painting system, such as thermoplastic markings, can be fully implemented in conjunction with our ongoing pavement reconstruction projects.

The painting is usually done prior to the late spring annual FAA inspection. Unfortunately we must plan for a complete repainting on an annual basis at an estimated cost of \$150,000; and if we are fortunate enough to be able to participate in further "state-wide" painting contracts through MassDOT, we will only use our funds to supplement the MassDOT funded painting contract as needed. Various airport runway and taxiway construction projects also include painting and the judicious use of these projects will also reduce overall annual costs.

The airport tried to accomplish this task "in-house" but despite our best efforts we simply cannot provide the painting expertise to meet FAA standards. Contracting with an experienced airport painting company does meet the standard and saves the airport considerable manpower costs and provides a more "professional" finished product. In addition, all airport roadway markings also require annual painting as required for vehicular and pedestrian safety for similar reasons.

Impact of Denial/Postponement: The runway and taxiway painting is a Federal Aviation Administration (FAA) safety requirement. Roadway painting is a vehicular and pedestrian safety requirement. Failure to provide the runway and taxiway painting could result in loss of airport FAA certification and our ability to provide airport services to commercial aircraft. It would also eliminate our eligibility to receive FAA Airport Improvement Project (AIP) grant funding. The BMA will continue to provide painting "in-house" that does not meet FAA standards, with the increased risk of a reduction in flight safety; and the airport would continue to paint our roadways in a less than professional manner and with a negative impact on our ability to get all airport maintenance tasks completed with a small work force.

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	\$150,000	\$600,000
	Total Project Cost	\$150,000	\$600,000

Basis for Cost Estimates: Recent previous similar contracts.

Project Estimated Completion Date: 2018 Design & Permit (months) 1 Construction (months) 1

Cost/Description FY 2018 and Follow-On Years:

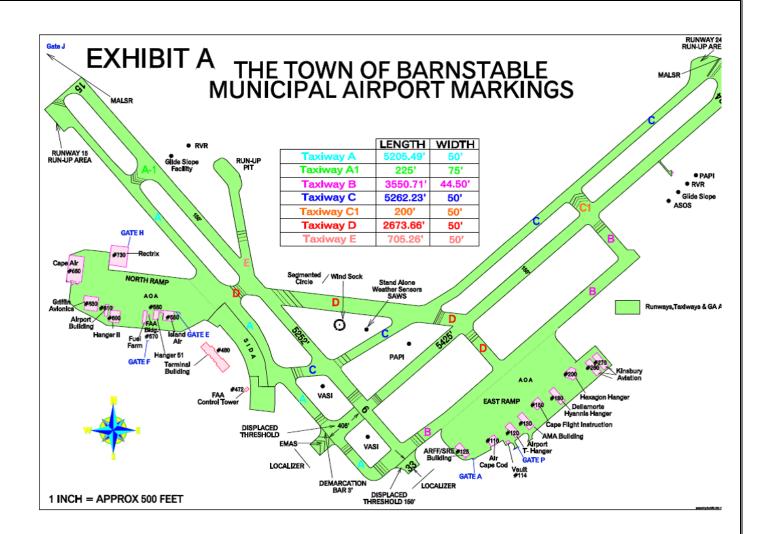
Fiscal Year	Cost	Project Description/Components
2018	\$150,000	Painting
2019	\$150,000	Painting
2020	\$150,000	Painting
2021	\$150,000	Painting
2022	\$150,000	Painting

Source of Funding: Airport Enterprise Fund Reserves \$150,000

Operating Budget Impact now or in future: Labor and materials savings will be used for other required projects and help to eliminate work backlog.







Sample of taxiway and roadway painting; and airport markings map of airport.

Administrative Services General Fund Project

PROJECT: ADM-FIN-18-1

DEPARTMENT PRIORITY: 1 of 1

2017-095

Project Working Title: Tyler Content Manager (TCM)

Project Location: Various town locations

Project Description: This project will automate the Town's vendor payment system. Currently, every town and school location manually enters their invoices into the Munis system, makes a copy of the invoice for their files, and delivers the original invoice to the Accounts Payable Office in the School Administration Building. TCM will allow every location to scan the original invoice into the Munis system and electronically deliver it to the accounts payable staff. In addition, original invoices will no longer need to be copied saving time and paper, and they will be stored at its originating site eliminating storage space needs in the accounting operations. TCM is scalable and can be used to automate other paper processes. This project will be initiated by automating one of the most paper intensive processes we have being vendor invoices.

Project Justification: This will be a budget and time savings to the town. It will eliminate the need for employees to copy all their invoices and deliver them to the Finance Division. This will also reduce the number errors, lost batches, paper, the need for storage and will significantly aid is researching invoices as they will be available on-line. TCM can conform to the State's Records Management requirements as well reducing the need for storage space by the Town.

Impact of Denial/Postponement: Employees will continue to spend time making copies, delivering invoices to the accounting office and researching files as opposed to spending valuable time on other department related functions.

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	\$105,300	None
	Total Project Cost	\$105,300	None

Basis for Cost Estimates: Received an Estimate proposal from Tyler Technologies

Project Estimated Completion Date: 2017 Design & Permit (months) 0 Construction (months) 4

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$105,300	Module implementation; purchase of scanners

Source of Funding: Capital Trust Fund Reserves \$105,000

Operating Budget Impact now or in future: \$8,100/yearly maintenance

Two foreseeable cost savings.

1. Annual employee time cost savings = \$25,000

2. Annual expense cost savings (paper) = \$2,000

2018 CIP – Administrative Services General Fund Project

PROJECT: CSD-18-9

DEPARTMENT PRIORITY: 9 of 18 Comm

Community Preservation Fund

Project Working Title: Centerville Recreation Interior Improvements

Project Location: 524 Main Street, Centerville, MA 02632

Project Description: This project will fund the on-going historic adaptive reuse improvements to the Centerville Community Building and its related systems. For the past several years, improvements have been made to the interior and exterior of the building and adjoining program areas. These funds will continue repair and restoration work to related items of greatest concern:

• Replacement of steam heat, including systems with modulating gas boilers. This item includes work to all steam pipe and radiators/baseboard heaters.

• Corridor white paneling to be removed, original drywall or plaster to be restored, with new doors installed at the old first floor classroom.

• Ceiling repair work will be done through various spaces. Lighting and concealed wiring work will include new energy efficient light fixtures that reflect the historic character of the building. New kitchen cabinets and counters are to be installed Chalkboards will be restored and the interior spaces painted.

Project Justification: The Centerville Community Building is a facility that is heavily used by Recreation Division programs, and the public on a daily basis, along with its adjoining playground and ballfield. It is one of the busiest Town facilities used by our residents and programs. Continuing to renovate and maintain this town asset adds to the preservation of a historic town resource. Funding the improvements would alleviate high energy costs and make a more comfortable facility. Given the heavy use of this facility, the interior needs a significant amount of upkeep and maintenance which has been deferred for years. Our intention is to bring the building up to standard for safe use by all the citizenry.

Impact of Denial/Postponement: The interior of this building is in poor condition and will continue to decline without much needed maintenance and repair. The building will lose popularity with its users. This building has great historical significance, containing two, albeit in poor condition old school rooms with Coleman murals, which are a valuable historical resource.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	\$12,584	N/A
	Construction or Acquisition	\$254,680	N/A
	Project Management	\$12,584	N/A
	Project Contingency	\$12,584	N/A
	Total Project Cost	\$292,432	\$789,432

Basis for Cost Estimates: In-house Architect

Project Estimated Completion Date: 2018

Design & Permit (months) 3 **Construction (months)** 6

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components		
2018	\$ 292,432	Replace steam heat with new gas modulating boiler, pipe work and radiators, replace paneling and restore corridor and doors, restore old chalkboard and historic paint.		
2019	\$150,000	Replace worn out aluminum windows with new energy efficient historic wood windows. Additional insulation to Building. Install new window treatments and blinds.		
2020	\$75,000 Interior wainscoting and trim to be replaced with historically control additional painting			
2021	\$25,000	Attic floor and insulation to be repaired, review roof ventilation		
2022	\$539,432			

Source of Funding: Community Preservation Funds \$292,000

Operating Budget Impact now or in future: To be determined









Centerville Recreation Interior

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2018 CIP -

PART V – CAPITAL TRUST FUND CASH FLOW ANALYSIS

The Capital Trust Fund (CTF) is used as a mechanism to finance the Town's general fund capital improvements program within the limitations of Proposition 2½. Annually, the Town transfers a sum of money from the general fund into the CTF. The resources within the CTF are then used to make the annual loan payments on the bonds issued to finance the Town's capital program. The CTF operates essentially as a debt service fund. Some of the Town's capital appropriations are financed using the reserves within the CTF as opposed to bond issues. Annually, the Town reviews the projected cash flows in and out of the CTF for the prospective 20-year period in order to measure the level of additional capital appropriations the fund can absorb.

For the most part, this fund is not the funding source for enterprise fund capital improvements. Most enterprise funds pay 100% of their capital cost, which is recovered through their respective user fees. Enterprise fund capital improvements may be funded from the CTF, which is a policy decision. The two current exceptions are the bond issues for the construction of the Hyannis Youth & Community Center (HYCC) and the bond issue for the Barnstable Harbor Marina bulkhead replacement.

The FY18 general fund Capital Improvements Program includes a combination of "pay-as-you-go" or cash financing and new bond issues. The cash-financing portion of the program is funded from the capital trust fund reserves and balances remaining in appropriations from completed projects. This "pay-as-you-go" financing approach saves the Town thousands of dollars in the form of bond issuance and interest cost. It also provides the opportunity to have some capital program on an annual basis, and provides flexibility within the budget. With just a debt service program, the CTF can become saturated with loan payments and prohibit the approval of any new projects until the debt service from other projects expire. This would also reduce the Town's flexibility in its resource allocation as future cash flows are committed to fixed annual loan payments.

In the event of absolute necessity, the cash portion of the program could be converted to a debt program to allow for a larger capital program up front. For example, the Town could allocate \$1 million in cash per year for capital improvements or allocate \$1 million per year towards new debt service. \$1 million in new debt service could pay for a bond issue of approximately \$8 million with an amortization period of 10 years.

Furthermore, the cash program portion \$3.25 million could decrease the annual contribution from the general fund to the CTF, if the need for funding general fund operations is determined to be greater than the need for the capital expenditure. Countless scenarios can be created to allocate the annual cash flow of the CTF between cash and borrowing program.

The annual contribution to the CTF has grown to \$8.6 million in FY18. This amount is projected to increase by 2.5 percent per year in order to allocate more funds to the capital program. Even as more funds are allocated to the capital program, the Town's capital needs require a higher contribution level. Opportunities to increase this contribution are examined every year. In FY16, an additional \$4 million was transferred from the general fund reserves to provide for a greater level of capital funding over the next five years and another \$1 million is anticipated by the end of FY19.

Table A on page 75 illustrates the CTF cash flow for the next 10 years incorporating all existing loan payments and the FY18 proposed capital improvements program. Table B illustrates the potential capacity within the CTF over the next ten years, and Table C provides the detailed amortization of all existing loans to be paid out of the CTF.

Major Assumptions Used In Table A:

- Investment earnings will average 1.1% per year;
- The transfer from the general fund will increase 2.5% per year;
- Loan amortization on the FY17 & FY18 bond issues will include:
 - \$363,000 and \$314,000 over 5 years,
 - \$1,455,000 and \$900,000 over 10 years,
 - \$3,159,000 and \$1,730,000 over 15 years,
 - \$4,526,000 and \$4,143,000 over 20 years;
- The coupon rates on the bonds are estimated to range from 2.5% to 4.0% with the longer the amortization period the higher the interest rate;
- The FY17 bonds will be issued at a time so that the first loan payments will not be made until FY18 and the first payment on the FY18 bond issue will be in FY19;
- There are no estimated savings from bond refinancing included in the projection;
- The Federal government will not make any changes and the tax advantages of municipal bonds will remain intact;
- No other major changes will take place in the municipal bond market; and
- The cash funded portion of the capital program will total \$3.7 million per year.

Major Assumptions Used In Table B:

In addition to all of the assumptions in Table A, bond issues of \$7 million per year are included for the FY19 through FY27 capital programs with the following amortization amounts:

- \$500,000 annually over 5 years
- \$1,000,000 annually over 10 years
- \$1,500,000 annually over 15 years
- \$4,000,000 annually over 20 years

TABLE A – Estimated Capital Trust Fund Cash Flow FY 2018 – FY 2027

	ESTIMATED CAPITAL TRUST FUND CASH FLOW FY 2018 - FY 2027										
		FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027
1	Beginning Trust Fund Balance	\$ 15,268,243	\$13,668,957	\$ 12,093,308	\$ 11,096,924	\$ 10,809,552	\$13,266,116	\$ 14,299,030	\$ 16,166,992	\$ 18,954,665	\$ 22,147,478
	Resources:										
2	Investment Earnings	167,951	150,359	133,026	122,066	118,905	145,927	157,289	177,837	208,501	243,622
3	Private Road Betterments Collected	70,000	65,000	60,000	55,000	50,000	45,000	40,000	35,000	30,000	25,000
4	Transfer From General Fund	8,636,985	8,837,112	9,042,226	9,252,450	9,467,913	9,688,745	9,915,081	10,147,058	10,384,816	10,628,500
5	Additional Contribution From General Fund	-	-	-	-	2,000,000	-	-	-	-	1,000,000
6	Total Current Year Resources	8,874,936	9,052,471	9,235,252	9,429,516	11,636,818	9,879,672	10,112,370	10,359,895	10,623,317	11,897,122
7	Total Available Resources	24,143,178	22,721,428	21,328,560	20,526,441	22,446,370	23,145,788	24,411,400	26,526,886	29,577,982	34,044,600
	Commitments:										
8	Existing Debt Service Payments	(5,716,646)	(5,399,462)	(5,031,234)	(4,544,744)	(4,036,367)	(3,788,159)	(3,264,730)	(2,619,903)	(2,494,343)	(2,032,619)
9	Estimated Debt Service on FY17 CIP (\$9.5M)	(892,575)	(876,200)	(859,825)	(843,450)	(827,075)	(753,670)	(737,654)	(721,638)	(716,824)	(699,352)
10	Estimated Debt Service on FY18 CIP (\$7.1M)	-	(652,458)	(640,576)	(628,694)	(616,812)	(604,930)	(542,024)	(530,681)	(519,338)	(516,677)
11	Public Roads Program	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000)
12	Other Cash Program	(615,000)	(450,000)	(450,000)	(450,000)	(450,000)	(450,000)	(450,000)	(450,000)	(450,000)	(450,000)
13	Total Current Year Commitments	(10,474,221)	(10,628,120)	(10,231,635)	(9,716,888)	(9,180,254)	(8,846,759)	(8,244,408)	(7,572,222)	(7,430,504)	(6,948,648)
14	Increase (Decrease) in Trust Fund	(1,599,285)	(1,575,650)	(996,383)	(287,372)	2,456,564	1,032,914	1,867,962	2,787,673	3,192,813	4,948,474
15	Ending Trust Fund Balance	\$ 13,668,957	\$ 12,093,308	\$11,096,924	\$ 10,809,552	\$ 13,266,116	\$ 14,299,030	\$ 16,166,992	\$ 18,954,665	\$ 22,147,478	\$ 27,095,952
16	% of trust fund resources committed in CY (max = 80%)	44%	48%	50%	49%	43%	40%	35%	30%	26%	21%

This table illustrates the Capital Trust Fund's (CTF) cash flow incorporating all existing loan payments on previously authorized projects as well as the recommended projects for FY18. Cash funded projects in FY18 total \$3,865,000 and bond funded projects total \$7.087 million. The bonds will be issued in FY18 and the first estimated loan payment of \$652,458 is anticipated to be made in FY19 as illustrated above on line 10. Line 8 in the table above includes all existing loan payments. Line 9 illustrates the estimate debt service payment on the Town's FY17 bond issue which had not been sold at the time of writing this report. Lines 11 and 12 include estimates on future cash appropriations for capital to be financed from the trust fund's reserves. One-time additional resources to be added to the fund in FY22 and FY27 are included on line 5. The percentage of the trust fund's current year resources that are committed in any year are less than the Administrative Code limit of 80% (line 16) indicating that the fund has the capacity to absorb more debt financed projects in future years.

2018 CIP - Capital Trust Fund Cash Flow Analysis

		ESTIMATE	D CAPITAL	TRUST FUN	D CASH FLO	W 10 Year	Plan Projec	tion			
		FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027
1	Beginning Trust Fund Balance	\$ 15,268,243	\$ 13,833,957	\$ 12,260,123	\$ 10,590,574	\$ 8,967,557	\$ 9,438,497	\$ 7,848,307	\$ 6,468,185	\$ 5,484,047	\$ 4,392,319
	Resources:										
2	Investment Earnings	167,951	152,174	134,861	123,921	120,781	147,823	159,206	179,775	210,461	245,603
3	Private Road Betterments Collected	70,000	65,000	60,000	55,000	50,000	45,000	40,000	35,000	30,000	25,000
4	Transfer From General Fund	8,636,985	8,837,112	9,042,226	9,252,450	9,467,913	9,688,745	9,915,081	10,147,058	10,384,816	10,628,500
5	Additional Contribution From General Fund	-	-	-	-	2,000,000	-	-	-	-	1,000,000
6	Total Current Year Resources	8,874,936	9,054,286	9,237,087	9,431,371	11,638,694	9,881,568	10,114,287	10,361,833	10,625,277	11,899,103
7	Total Available Resources	24,143,178	22,888,243	21,497,210	20,021,946	20,606,251	19,320,065	17,962,594	16,830,018	16,109,324	16,291,422
	Commitments:										
8	Existing Debt Service Payments	(5,716,646)	(5,399,462)	(5,031,234)	(4,544,744)	(4,036,367)	(3,788,159)	(3,264,730)	(2,619,903)	(2,494,343)	(2,032,619)
9a	Estimated Debt Service on FY17 CIP	(892,575)	(876,200)	(859,825)	(843,450)	(827,075)	(753,670)	(737,654)	(721,638)	(716,824)	(699,352)
9b	Estimated Debt Service on FY18 CIP	-	(652,458)	(640,576)	(628,694)	(616,812)	(604,930)	(542,024)	(530,681)	(519,338)	(516,677)
9c	Estimated Debt Service on FY19 CIP		-	(675,000)	(662,500)	(650,000)	(637,500)	(625,000)	(523,750)	(512,750)	(501,750)
9d	Estimated Debt Service on FY20 CIP			-	(675,000)	(662,500)	(650,000)	(637,500)	(625,000)	(523,750)	(512,750)
9e	Estimated Debt Service on FY21 CIP				-	(675,000)	(662,500)	(650,000)	(637,500)	(625,000)	(523,750)
9f	Estimated Debt Service on FY22 CIP					-	(675,000)	(662,500)	(650,000)	(637,500)	(625,000)
9g	Estimated Debt Service on FY23 CIP						-	(675,000)	(662,500)	(650,000)	(637,500)
9h	Estimated Debt Service on FY24 CIP							-	(675,000)	(662,500)	(650,000)
9i	Estimated Debt Service on FY25 CIP								-	(675,000)	(662,500)
9j	Estimated Debt Service on FY26 CIP									-	(675,000)
10	Public Roads Program	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000)	(3,250,000)
11	Other Cash Program	(450,000)	(450,000)	(450,000)	(450,000)	(450,000)	(450,000)	(450,000)	(450,000)	(450,000)	(450,000)
12	Total Current Year Commitments	(10,309,221)	(10,628,120)	(10,906,635)	(11,054,388)	(11,167,754)	(11,471,759)	(11,494,408)	(11,345,972)	(11,717,004)	(11,736,898)
13	Increase (Decrease) in Trust Fund	(1,434,285)	(1,573,835)	(1,669,548)	(1,623,017)	470,939	(1,590,190)	(1,380,121)	(984,139)	(1,091,728)	162,205
14	Ending Trust Fund Balance	\$ 13,833,957	\$ 12,260,123	\$ 10,590,574	\$ 8,967,557	\$ 9,438,497	\$ 7,848,307	\$ 6,468,185	\$ 5,484,047	\$ 4,392,319	\$ 4,554,524
15	% of trust fund resources committed in CY (max = 80%)	44%	48%	53%	58%	57%	63%	69%	73%	80%	80%
	Bond Financed Program	7,087,000	7,000,000	7,000,000	7,000,000	7,000,000	7,000,000	7,000,000	7,000,000	7,000,000	7,000,000
	Cash Funded Program	3,700,000	3,700,000	3,700,000	3,700,000	3,700,000	3,700,000	3,700,000	3,700,000	3,700,000	3,700,000
	Total	10,787,000	10,700,000	10,700,000	10,700,000	10,700,000	10,700,000	10,700,000	10,700,000	10,700,000	10,700,000

TABLE B – Capital Trust Fund Estimated Capacity For The Next 10 Years

Including the proposed FY18 capital program, it is estimated the Capital Trust Fund can absorb approximately \$96 million in projects over the next 10 years and stay within the maximum allowable commitment of 80% as shown on line 15. Cash financed capital is estimated at \$37 million and bond financed capital is estimated a \$63 million through FY27. The estimated annual loan payments on the bonds are illustrated on lines 9a through 9j.

TABLE C – Capital Trust Fund Debt Amortization Schedule As Of June 30, 2016

DEBT SERVICE PROGRAM		Issued	Maturity	Principal	P&I Payments									
Purpose		Date	Date	Amount	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
CTF Building - Senior Center - Refunded	11	I 02/15/07	02/15/19	702,378	79,790	26,250	-	-	-	-	-	-	-	-
CTF MWPAT CW-04-31 Pool 11	1	I 11/09/07	07/15/20	389,216	33,999	33,999	33,999	33,999	-	-	-	-	-	-
CTF Coastal Water Quality Improvements	0	06/26/08	06/15/18	250,000	25,140	-	-	-	-	-	-	-	-	-
CTF Lake & Pond Improvements	11	06/26/08	06/15/18	250,000	25,140	-	-	-	-	-	-	-	-	-
CTF Bismore Park Visitor Center	1	1 06/26/08	06/15/23	465,000	32,473	-	-	-	-	-	-	-	-	-
CTF Bismore Park Visitor Center - CAP	1	1 06/26/08	06/15/23	150,000	10,475	-	-	-	-	-	-	-	-	-
CTF Boat Ramps - CAP	1	1 06/26/08	06/15/23	927,000	64,945	-	-	-	-	-	-	-	-	-
CTF Land Acquisition - CAP	1		06/15/23	365,200	25,140	-	-	-	-	-	-	-	-	-
CTF Pleasant St. Dock - 1		1 06/26/08	06/15/23	350.000	24.093	-	-	-	-	-	-	-	-	-
CTF Pleasant St. Dock - 2	1		06/15/23	350,000	24.093	-	-	-	-	-	-	-	-	-
CTF Private Road Repairs	1			1.607.900	112.083	-	-	-	-	-	-	-	-	-
CTF Municipal Building Improvements	1			297,000	5.238	-	-	-	-	-	-	-	-	-
CTF School Facility Improvements 1 (I)	1			916,600	31,425	-	-	-	-	_	-	-	-	
CTF School Building Improvements	i i			936,000	65,869	64,744	62,494	61,144	59,794	58,331	56,869	55,294	53,719	52,088
CTF Dredging				419,250	36,875	36,125	34,625	33,725	32,825	31,850	25,875		-	-
CTF Lake Treatment	- i li			275,000	24,575	24,075	23.075	17,475	17.025	16,538	16,050	15,525		-
CTF Municipal Facility Improvements	- i li		06/15/29	402,500	7,119	6,994	6,744	6,594	6,444	6,281	6,119	5,944	5,769	5,588
CTF Police Facility	- i li		06/15/30	508.000	36.594	35.969	34.719	33.969	33.219	32,406	31.594	30.719	29.844	28.938
CTF Nitrogen Management CW-04-31-A			07/15/20	211,460	23,330	23.330	23,330	23,330		52,400	51,554		25,644	20,550
0 0			06/15/31	,						-	-		-	-
CTF School Facilities Upgrades/Repairs V (I)			06/15/31	884,000	68,719	66,919	65,119	63,319	61,519	59,719	57,919	56,400	54,825	53,138
CTF Advance Refund 6/15/2002 Land Acquisitions BUTAPS		06/14/11		1,102,000	145,600	140,400	135,200							-
CTF Boat Ramp Renovations			06/15/21	250,000	29,000	28,000	27,000	26,000	-	-	-	-	-	-
CTF Bridge Repair				250,000	29,000	28,000	27,000	26,000	-	-	-	-	-	-
CTF Building - Town Hall Space - 00-110 Refunded	11			180,000	23,080	21,280	20,520	19,760	-	-	-	-	-	-
CTF Dredging East Bay & Blish Point	1		06/15/21	665,000	75,400	72,800	70,200	67,600	-	-	-	-	-	-
CTF Municipal Facility Improvement	1		06/15/21	300,000	34,800	33,600	32,400	31,200	-	-	-	-	-	-
CTF School Facilities Upgrades/Repairs IV	11		06/15/21	332,000	34,800	33,600	32,400	31,200	-	-	-	-	-	-
CTF School Parking Lot (I)	1		06/15/21	250,000	29,000	28,000	27,000	26,000	-	-	-	-	-	-
CTF Sidewalk Improvements	1		06/15/21	350,000	40,600	39,200	37,800	36,400	-	-	-	-	-	-
CTF Building - Town Hall Repairs - 01-087 Refunded	11		06/15/22	100,000	11,960	11,560	11,160	10,760	9,360	-	-	-	-	-
CTF School Remolding - Asbestos 00-110 Refunded	11		06/15/22	50,000	6,000	5,800	5,600	5,400	5,200	-	-	-	-	-
CTF Baxter Neck Road's - Private Way	11	I 06/14/11	06/15/26	350,000	32,725	31,725	30,725	29,725	23,725	22,925	22,125	21,450	20,750	-
CTF Prince Cove/Hayward Rd. Boat Ramp	1		06/15/26	600,000	53,850	52,250	50,650	49,050	47,450	45,850	44,250	42,900	41,500	-
CTF School Facilities Upgrades/Repairs II	1		06/15/26	179,000	13,463	13,063	12,663	12,263	11,863	11,463	11,063	10,725	10,375	-
CTF School Facilities Upgrades/Repairs III	11	I 06/14/11	06/15/26	190,000	18,863	18,263	12,663	12,263	11,863	11,463	11,063	10,725	10,375	-
CTF School Improvement (I)	1	I 06/14/11	06/15/26	487,000	45,588	39,188	37,988	36,788	35,588	34,388	33,188	32,175	31,125	-
CTF Advance Refund 6/15/2003 Main St. Hyannis Infr. Improv.	1	I 04/18/12	09/15/20	39,100	5,523	5,348	5,198	4,162	-	-	-	-	-	-
CTF Advance Refund 6/15/2003 Building Improvements	11	I 04/18/12	09/15/22	96,600	11,764	11,414	11,114	10,814	10,464	6,732	-	-	-	-
CTF Advance Refund 6/15/2003 Drainage 1 (i)	1	I 04/18/12	09/15/22	193,200	23,528	22,828	22,228	21,628	18,968	15,504	-	-	-	-
CTF Advance Refund 6/15/2003 Drainage 2 (i)	1	I 04/18/12	09/15/22	96,700	11,768	11,418	11,118	10,818	10,468	6,834	-	-	-	-
CTF Advance Refund 6/15/2003 Police Facility Addition	1	04/18/12	09/15/22	626,900	76,557	71,229	67,500	65,700	63,600	61,200	-	-	-	-
CTF Advance Refund 6/15/2003 School Remodel I	1	1 04/18/12	09/15/22	242,700	30,299	29,389	28,609	22,806	21,192	20,196	-	-	-	-
CTF Advance Refund 6/15/2003 School Remodel II	1		09/15/22	193,400	23,480	22,780	22,180	21,580	17,940	15,300	-	-	-	-
CTF Beach Facility Design	i i	- / -/	11/15/18	115,000	20,600	20,200	-	-	-	-	-	-	-	-
CTF Guardrail Replacements	- i i			60,000	10,300	10,100	-	-	-	-	-	-	-	-
CTF Intermediate School Roof & Facade Design		11/22/13		100.000	20,600	20,200	-	-	-	-	-	-	-	-
CTF Lombard Parking & Ballfield Design	- i li	, , .	1 - 1 -	101.000	20,600	20,200			-					
CTF School Grounds Maintenance Equipment		11/22/13	1 - 1 -	150.000	30,900	30.300	-			-	-	-		

DEBT SERVICE PROGRAM		Leave d	Maturity	Principal	D8 Daymonto	D8 Daymonto	D.Q.I. Doumonto	DQ Dourse onto	P&I Payments	DQ Doursonto	P&I Payments	P&I Payments	P&I Payments	P&I Payments
		Issued			FY 2018	FY 2019	FY 2020	P&I Payments	FY 2022	FY 2023		FY 2025		FY 2027
Purpose CTF School Gym Bleacher Upgrades		Date	Date	Amount 55,000	10,300	10,100		FY 2021	-	FY 2023	FY 2024		FY 2026	
	-	1 11/22/13		-		10,100	-	-	· ·	-	-	· ·	-	-
CTF School Hot Water Pump Replacement	_			85,000	15,450									
CTF School Kitchen equipment	_	11/22/13		110,000	20,600	20,200	-	-	-	-	-	-	-	-
CTF Sewer Expansion Analysis	_	11/22/13		70,000	15,350	10,100	-	-	-	-	-	-	-	-
CTF Bumps River Bridge Repair	_	11/22/13		120,000	16,750	11,500	11,250	10,950	10,650	10,375	10,125	-	-	-
CTF East Bay Dredging	_	11/22/13		600,000	70,200	69,000	67,500	65,700	63,900	62,250	60,750	-	-	-
CTF Guyer Barn Upgrades		11/22/13		148,000	17,425	17,125	16,750	16,300	15,850	15,438	10,125	-	-	-
CTF Highway Operations Facility Construction	_	11/22/13		66,000	5,850	5,750	5,625	5,475	5,325	5,188	5,063	-	-	-
CTF HS Library AC Units	-	11/22/13	1 - 1 -	450,000	52,650	51,750	50,625	49,275	47,925	46,688	45,563	-	-	-
CTF Hyannis Harbor Bulkhead Construction	-	11/22/13	1 - 1 -	142,000	17,150	16,850	16,475	16,025	10,650	10,375	10,125	-	-	-
CTF MEA Facility Upgrades	_	11/22/13		131,000	17,000	16,700	16,325	10,950	10,650	10,375	10,125	-	-	-
CTF Millway Boat Ramp & Dock Upgrades	_	11/22/13		133,000	17,000	16,700	16,325	10,950	10,650	10,375	10,125	-	-	-
CTF Osterville Community Building Upgrades	_	11/22/13		200,000	23,400	23,000	22,500	21,900	21,300	20,750	20,250	-	-	-
CTF Pearl St Building Upgrades	Т	11/22/13	11/15/23	114,000	11,700	11,500	11,250	10,950	10,650	10,375	10,125	-	-	-
CTF Police Station Upgrades	Т	I 11/22/13	11/15/23	168,000	17,550	17,250	16,875	16,425	15,975	15,563	15,188	-	-	-
CTF Private Road Repairs (I)	Т	11/22/13	11/15/23	633,000	75,500	74,200	72,575	65,700	63,900	62,250	60,750	-	-	-
CTF S&G Facility Roof Repairs	Т	11/22/13	11/15/23	103,000	11,700	11,500	11,250	10,950	10,650	10,375	10,125	-	-	-
CTF School Computer Network Infrastructure	Т	11/22/13	11/15/23	189,000	23,000	22,600	22,100	21,500	15,975	15,563	15,188	-	-	-
CTF School Fire & Communications System	Т	11/22/13	11/15/23	200,000	23,400	23,000	22,500	21,900	21,300	20,750	20,250	-	-	-
CTF School Roof Repairs	I	1 11/22/13	11/15/23	600,000	70,200	69,000	67,500	65,700	63,900	62,250	60,750	-	-	-
CTF Sidewalk Overlays	1	1 11/22/13	11/15/23	190,000	23,150	22,750	22,250	21,650	21,050	15,563	15,188	-	-	-
CTF Tennis Courts	1	1 11/22/13	11/15/23	500,000	58,500	57,500	56,250	54,750	53,250	51,875	50,625	-	-	-
CTF Town Hall Interior Upgrades	1	1 11/22/13	11/15/23	150.000	17,550	17.250	16,875	16,425	15.975	15,563	15.188	-	-	-
CTF US Custom House upgrades	_	1 11/22/13	<u> </u>	263,000	29,250	28,750	28,125	27,375	26,625	25,938	25,313	-	-	-
CTF Water Quality Evaluation	_	1 11/22/13		230,000	28,700	28,200	27,575	21,900	21,300	20,750	20,250	-	-	-
CTF West Barnstable Community Building Upgrades	_	1 11/22/13		72,000	10,900	5,750	5,625	5,475	5,325	5,188	5,063	-	-	-
CTF Beach Facilities Improvements (I) \$270,000 Refunded	_	02/15/15		71,300	17,985	16,310	15,680	15,120	14,560	-	-	-	-	-
CTF Marstons Mills Fish Run Reconstruction		02/17/15		326.000	34,875	33.750	27,625	26,825	26.025	25.225	24.425	23.625	22.825	22.225
CTF Senior Center - Parking Lot Expansion	_	1 02/17/15		290.000	29.125	28.225	27.325	26,525	25,725	24.925	24.125	23.325	22,525	21.925
CTF Centerville Recreation Building	_	1 02/17/15		185.000	15.763	15.313	14.863	14.463	14.063	13.663	13.263	12.863	12.463	12.163
CTF Early Learning Center Modular Facility	-	1 02/17/15		2,000,000	162,125	157,625	153,125	149,125	145,125	141,125	137,125	133,125	129,125	126,125
CTF Police Facilities	_	1 02/17/15		288,000	23,869	23,194	22,519	21,919	21.319	20,719	20,119	19,519	18,919	18,469
CTF Blish Point Sand Management	_	1 02/17/15		215,000	50.425	43,400	41,600	-	-			-	-	-
CTF Dredge Permitting/Planning	-	1 02/17/15		341,000	78,675	70,525	67,600		-			-	-	
	_	02/17/15		200.000	45,200	43,400	41.600						-	-
CTF Sidewalk/Guardrail Improvements 1 CTF Sidewalk/Guardrail Improvements 2	-	1 02/17/15		85,000	45,200	43,400	41,600	-	-	-	-	-	-	-
CTF School Facilities Repair & Improvement (I) \$660,000 Refunded	_	1 02/17/15		199,700	51,390	49,455	42,520	41,000	- 38,480					
CTF School Upgrades 1 (I) \$360,000 Refunded	_	1 02/17/15		199,700	28,127	27,360	42,520	20,520	19,760	-	-		-	-
	_	1 02/17/15				,	21,280			-	-	- 18,720	-	-
CTF Police Station Construction (I) \$400,000 Adv Refunded 6-15-05	_			181,650	23,783	23,130		21,600	20,880	20,160	19,440	,		
CTF Land Acquisition (I) - Hyannis Golf Course \$748,000 Refunded	-	02/17/15		325,200	52,065	49,310	47,600	46,080	44,560	43,040	35,520	34,240	32,960	-
CTF MME Roof Replacement (I) \$750,000 Refunded	-	I 02/17/15		329,800	52,056	49,510	47,800	46,280	44,760	43,240	40,720	34,240	32,960	-
CTF School Health & Safety Improvements \$478,000 Refunded	_	I 02/17/15		193,400	31,780	30,700	29,620	28,660	27,700	21,740	19,980	19,260	18,540	-
CTF BHMCS Roof (I) \$910,000 Refunded	-	I 02/17/15	- 1 -1	426,900	60,581	57,705	55,770	54,050	52,330	50,610	48,890	46,170	44,490	42,230
CTF School Upgrades 2 (I) \$150,000 Refunded	_	I 02/17/15		47,400	6,766	6,645	6,420	6,220	6,020	5,820	5,620	4,920	4,240	4,120
CTF Senior Center - Garden Level \$457,000 Refunded	_	I 02/17/15		195,000	31,635	25,555	24,700	23,940	23,180	22,420	21,660	20,900	20,140	19,570
CTF Town Building Repairs & Renovations \$685,000 Refunded	-	I 02/17/15		317,600	46,470	44,940	43,410	41,050	39,730	38,410	37,090	30,770	29,650	27,810
CTF Nitrogen Management CW-04-31-B Series 16	-	I 05/14/15		157,531	27,842	27,882	27,922	27,963	-	-	-	-	-	-
CTF BCHMCPS Façade & Roof Improvements (#2015-117)	Т	I 02/25/16	06/30/26	260,000	39,200	33,000	32,000	31,000	30,000	29,000	28,000	27,000	26,000	-

2018 CIP - Capital Trust Fund Cash Flow Analysis

DEBT SERVICE PROGRAM		Issued M	laturity	Principal	P&I Payments									
Purpose		Date	Date	Amount	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
CTF Channel Dredging-Barnstable Harbor (#2016-035)	11	02/25/16 06	6/30/26	490,000	67,600	65,600	63,600	61,600	59,600	57,600	55,600	48,600	46,800	-
CTF High School & Middle School Boiler Upgrades (#2015-119)	11	02/25/16 06	6/30/26	350,000	47,600	46,200	44,800	43,400	42,000	40,600	39,200	37,800	36,400	-
CTF Paving: Bay Stree Boat Ramp (#2015-099)	11	02/25/16 06	5/30/26	142,000	20,000	19,400	18,800	18,200	17,600	17,000	16,400	10,800	10,400	-
CTF W Village Elementary A/C Replacement (#2015-120)	11	02/25/16 06	5/30/26	250,000	34,000	33,000	32,000	31,000	30,000	29,000	28,000	27,000	26,000	-
CTF Hamblin Pond Alum Treatment (#2015-112)	11	02/25/16 06	5/30/31	300,000	29,725	28,925	28,125	27,325	26,525	25,725	24,925	24,125	23,325	22,525
CTF Joshua's Pond Recretional Facility (#2015-111)	11	02/25/16 06	5/30/31	282,000	29,194	28,394	27,594	26,794	25,994	25,194	24,394	23,594	22,794	21,994
CTF Road Repairs - Governors Way (#2016-037)	11	02/25/16 06	6/30/31	304,000	29,725	28,925	28,125	27,325	26,525	25,725	24,925	24,125	23,325	22,525
CTF Road Repairs (#2015-102)	11	02/25/16 06	5/30/31	518,000	51,719	50,319	48,919	47,519	46,119	44,719	43,319	41,919	40,519	39,119
CTF BIS Façade & Roof Improvements (#2015-116)	11	02/25/16 06	5/30/36	3,353,000	276,781	269,981	263,181	256,381	249,581	242,781	235,981	229,181	222,381	210,581
CTF Craigville Beach Bathhouse (#2016-031)	11	02/25/16 06	5/30/36	450,000	39,525	38,525	37,525	36,525	35,525	34,525	33,525	32,525	31,525	25,525
CTF Elementary School Modular Classroom (#2015-115)	11	02/25/16 06	5/30/36	3,720,000	308,306	300,706	293,106	280,506	273,106	265,706	258,306	250,906	243,506	236,106
CTF Guardrail Improvements (#2015-098)	11	02/25/16 06	5/30/36	170,000	26,000	25,200	24,400	18,600	18,000	17,400	16,800	16,200	15,600	-
CTF Police Station Remodeling (#2015-100)	11	02/25/16 06	5/30/36	355,000	31,444	30,644	29,844	29,044	28,244	27,444	26,644	25,844	25,044	24,244
CTF Sidewalk Improvements (#2015-098)	11	02/25/16 06	5/30/36	230,000	33,200	32,200	31,200	30,200	29,200	23,200	22,400	21,600	20,800	-
CTF Town Hall Remodeling (#2015-101)	11	02/25/16 06	5/30/36	939,000	79,831	77,831	75,831	73,831	71,831	69,831	62,831	61,031	59,231	57,431
CTF Bismore Park Visitor Center - CAP \$150,000	11	06/21/16 06	5/30/23	48,000	1,920	11,920	11,520	11,120	8,720	10,400	-	-	-	-
CTF Bismore Park Visitor Center \$465,000 Refunded	11	06/21/16 06	5/30/23	147,500	5,900	35,900	34,200	33,520	32,320	29,120	-	-	-	-
CTF Boat Ramps - CAP \$927,000 Refunded	11	06/21/16 06	5/30/23	290,000	11,600	66,600	69,400	67,000	64,600	57,200	-	-	-	-
CTF Land Acquisition - CAP \$365,200 Refunded	11	06/21/16 06	5/30/23	115,000	4,600	28,600	27,640	26,680	23,720	21,840	-	-	-	-
CTF Pleasant St. Dock - 1 \$350,000 Refunded	11	06/21/16 06	5/30/23	109,500	4,380	27,380	25,960	24,560	22,680	21,840	-	-	-	-
CTF Pleasant St. Dock - 2 \$350,000 Refunded	11	06/21/16 06	5/30/23	110,000	4,400	27,400	26,480	24,560	22,680	21,840	-	-	-	-
CTF Private Road Repairs \$1,607,900	11	06/21/16 06	5/30/23	509,000	20,360	125,360	120,160	112,000	108,000	104,000	-	-	-	-
CTF Municipal Building Improvements \$297,000 Refunded	11	06/21/16 06	5/30/28	49,300	1,572	6,572	5,672	6,200	6,000	5,800	5,600	5,400	5,300	5,200
CTF School Facility Improvements 1 (I) \$916,600 Refunded	11	06/21/16 06	5/30/28	295,700	9,428	39,428	36,928	34,080	36,000	34,800	33,600	32,400	31,800	31,200
TOTAL GENERAL FUND DEBT SERVICE					4,462,479	4,181,931	3,861,053	3,410,003	2,940,066	2,734,177	2,250,789	1,643,583	1,557,868	1,130,836
CTF HYCC 4		06/26/08 06		6,765,000	354,055	-	-	-	-	-	-	-	-	-
CTF Marina Bulkhead Repair I		06/14/11 06		725,000	58,831	57,231	55,631	54,031	52,431	50,831	44,231	43,050	41,825	40,513
CTF HYCC 1 (I) \$1,000,000 Refunded	11	02/17/15 02		474,900	66,446	64,390	62,230	60,310	58,390	56,470	53,550	51,670	49,790	47,380
CTF HYCC 2 (I) \$8,000,000 Refunded	11	02/17/15 02		3,794,400	535,190	515,775	495,450	480,170	463,890	447,650	430,450	413,330	396,290	380,070
CTF HYCC 3 (I) \$1,600,000 Refunded	11	02/17/15 02		759,000	107,645	103,135	98,670	95,630	92,590	89,550	86,510	82,470	79,470	76,220
CTF HYCC 4 (I) \$6,765,000 Refunded	11	06/21/16 06	5/30/28	3,320,000	107,000	452,000	433,200	419,600	404,000	384,480	374,200	360,800	344,100	332,600
TOTAL ENTERPRISE FUND DEBT SERVICE					1,229,167	1,192,531	1,145,181	1,109,741	1,071,301	1,028,981	988,941	951,320	911,475	876,783
Temporary interest on bond anticipation notes					25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
GRAND TOTAL ALL DEBT SERVICE					5,716,646	5,399,462	5,031,234	4,544,744	4,036,367	3,788,159	3,264,730	2,619,903	2,494,343	2,032,619
UNAND IVIAL ALL DEDI JERVICE					5,710,040	3,333,402	5,051,254	4,344,744	4,030,307	3,700,139	3,204,730	2,019,905	2,434,343	2,032,019

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2018 CIP -

PART VI – SEWER CONSTRUCTION AND PRIVATE WAY MAINTENANCE AND IMPROVEMENTS FUND

Chapter 355 of the Acts of 2014 enacted by the General Court allows the Town of Barnstable to establish a special fund that may be used for the construction of sewers and the maintenance and improvements of private ways.

Dedicated revenue sources for this fund include 100% of the local meals excise tax and one-third of the local rooms excise tax. In addition, any betterment assessed to property abutters on sewer construction and private way improvements will also be credited to this fund if the fund is used to finance the improvements.

The Stewart's Creek sewer construction, West Main Street Pump Station and FY16 private way improvement projects are the only projects to date that have been accounted for within this special fund. The Town borrowed money from the Massachusetts Clean Water Trust to finance the construction of the sewer projects. The Town received low interest loans and principal subsidies on the loans. The loans will be paid back from the resources credited to this special fund. Betterments on the Stewarts Creek project were assessed to property abutters in the amount of 50% of the project costs. The betterments collected are credited to this fund.

The Fiscal Year 2018 Capital Program does not include any projects to be financed from this fund. On the following page is a 10 year projection for the fund's activity. With no additional projects included in the projection the fund is estimated to accumulated available resources amounting to \$36 million by fiscal year 2027.

						Proj	octe	hd						
	2018P	2019P	2020P	2021P		2022P		2023P		2024P		2025P	2026P	2027P
INT.PENALT.SEWER	\$ 24,000	\$ 22,000	\$ 20,000	\$ 18,000	\$	16,000	\$	14,000	\$	12,000	\$	10,000	\$ 8,000	\$ 6,000
HOTEL/MOTEL TAX	952,748	962,275	971,898	981,617		991,433		1,001,348		1,011,361		1,021,475	1,031,689	1,042,006
MEALS TAX	1,480,280	1,480,280	1,480,280	1,480,280		1,480,280		1,480,280		1,480,280		1,480,280	1,480,280	1,480,280
SEWER ASSESSMENT	128,391	121,391	114,391	107,391		100,391		93,391		86,391		79,391	72,391	65,391
EARNINGS ON INVESTMENT	 91,534	105,229	121,478	137,835		154,320		170,934		187,679		204,556	221,568	238,715
Total Revenues:	2,676,953	2,691,176	2,708,048	2,725,124		2,742,425		2,759,953		2,777,711		2,795,702	2,813,928	2,832,393
	 -0.45%	0.53%	0.63%	0.63%		0.63%		0.64%		0.64%		0.65%	0.65%	0.66%
PRINCIPAL LONG-TERM DEBT	372,642	380,507	388,541	396,742		405,117		413,669		422,402		431,320	440,426	449,724
INTEREST LONG TERM DEBT	128,259	120,728	113,037	105,184		97,166		88,978		80,617		72,080	63,363	54,461
DEBT ISSUANCE EXPENSES	9,500	9,000	8,500	8,000		7,500		7,000		6,500		6,000	5,500	5,000
Total Expenses:	510,402	510,235	510,078	509,926		509,783		509,647		509,519		509,400	509,288	509,185
Surplus Generated (Used)	2,166,552	2,180,941	2,197,970	2,215,197		2,232,642		2,250,306		2,268,192		2,286,302	2,304,640	2,323,207
Beginning Surplus	 14,030,556	16,197,108	18,378,049	20,576,019		22,791,216		25,023,858	2	27,274,164	2	29,542,356	31,828,659	34,133,299
Ending Surplus	\$ 16,197,108	\$ 18,378,049	\$ 20,576,019	\$ 22,791,216	\$:	25,023,858	\$2	27,274,164	\$2	29,542,356	\$3	31,828,659	\$ 34,133,299	\$ 36,456,506

PART VII – DEBT POSITION ANALYSIS

A. Type And Purpose Of Debt

The Town sells bonds to finance major capital improvements that require large cash outlays. General Obligation Bonds (G.O.B) have been sold to fund capital improvements managed by various municipal operations such as schools, public works, recreation, conservation, and the Town's enterprise fund operations. General Obligation Debt, (G.O.D), is supported by the full faith and credit of the Town and is repaid from property taxes collected from both current and future property owners throughout the term of the debt, except for the bonds issued to fund most capital improvements for enterprise fund operations. Although property taxes are pledged as collateral for enterprise fund GOB's, most of the bonds are repaid with revenue generated by the enterprise funds and not property taxes. This arrangement provides for more favorable borrowing rates for enterprise fund debt and is required by Massachusetts General Laws. Alternatively, enterprise funds would have to issue what are referred to as "Revenue Bonds", which would typically carry much higher interest rates, as the collateral is enterprise fund revenue as opposed to property taxes.

Properly structured municipal debt is tax exempt. This feature is attractive to many investors who, in turn, require less interest than they would from non-tax-exempt investments. Typical rates for municipal bonds over the past several years have been in the 1.5% to 4% range. Rates remain low in FY17 as the economy is making municipal bonds more attractive for highly rated communities. When netted out against inflation, municipal borrowing costs, especially for strong credit worthy Towns such as Barnstable is enviable.

The Town operates several enterprise funds including the airport, two golf courses, a wastewater treatment facility, a solid waste transfer station, water supply operations, four marinas, Sandy Neck Beach Park, and the Hyannis Youth & Community Center. These funds are expected to repay their debt from the revenues that they generate unless it is determined that a General Fund contribution is necessary to provide for some fee mitigation. In addition, the Town has borrowed on behalf of the Community Preservation Fund (CPF) that was created by general legislation to enable towns in the Commonwealth to acquire open space and to finance recreation, community housing, and historic preservation projects. The CPF, a special revenue fund, is funded with three percent surtax on each real estate tax bill. The Commonwealth provides a partial matching program for the surtax billed from a state trust account, which is funded by real estate transfer taxes. The matching program is expected to decline as more communities adopt the CPF, real estate transactions declining, as well as a decline in the State's trust fund balance.

B. Current Debt Position

As of June 30, 2016, the Town of Barnstable had \$107 million of outstanding long-term debt. New debt issued in FY16 was \$19 million and existing debt retired was \$12 million, representing a \$7 million net increase in the outstanding long-term debt level from June 30, 2015. These debt figures include all debt incurred on behalf of the governmental funds and enterprise funds.

Projected Debt Payments by Project and Fund

The following four tables set forth the projected General Obligation Debt (G.O.D.) payments by issue for both the Town's governmental funds and the enterprise funds. It is significant to note the State reimburses for school construction projects at the rate of 64% including interest costs incurred, as well as several Massachusetts Clean Water Trust (MCWT) loans for sewer construction, water system improvements and landfill capping loans.

Bonds Payable Schedule – Governmental Funds (Excludes Enterprise Fund Debt)

Projects	Maturities Through	Original Loan Amount	Coupon Rate (%)		Outstanding at June 30, 2015	 lssued	Redeemed	Outstanding at June 30, 2016
MCWT Title V Bond of 1997	2021 \$	200,000	0.00	\$	62,203	\$ - \$	(10,403) \$	51,800
MCWT Title V Bond of 2002	2023	200,000	0.00		80,240	-	(9,972)	70,268
MCWT Title V Bonds of 2006	2026	400,000	0.00		220,000	-	(20,000)	200,000
MCWT Title V Bond of 2007	2027	200,000	0.00		120,000	-	(10,000)	110,000
Municipal Purpose Bonds of 2007	2027	43,910,388	3.38 - 4.75		17,480,000	-	(4,245,000)	13,235,000
MCWT Bond of 2008 (CW-04-31)	2021	389,216	2.00		192,238	-	(30,460)	161,778
Municipal Purpose Bonds of 2008	2028	5,928,700	3.75 - 4.50		2,839,000	-	(2,113,000)	726,000
MCWT Bond of 2009	2021	887,454	2.00		289,444	-	(45,766)	243,678
Municipal Purpose Bonds of 2010	2030	3,873,270	2.00 - 5.00		2,550,000	-	(200,000)	2,350,000
Municipal Purpose Bonds of 2011	2031	15,451,000	2.00 - 4.00		9,310,000	-	(1,715,000)	7,595,000
Municipal Purpose Refunding of 2012	2023	10,037,900	2.00 - 4.00		6,879,500	-	(910,000)	5,969,500
Municipal Purpose Bonds of 2014	2024	6,248,000	2.00 - 3.00		5,455,000	-	(750,000)	4,705,000
Municipal Purpose Refunding of 2015	2027	5,265,500	2.00 - 4.50		5,265,500	-	(299,100)	4,966,400
Municipal Purpose Bonds of 2015	2035	3,930,000	2.00 - 4.50		3,930,000	-	(355,000)	3,575,000
Municipal Purpose Bonds of 2016	2036	12,113,000	2.00 - 4.00		-	12,113,000	-	12,113,000
Municipal Purpose Refunding of 2016	2028	1,674,000	2.00 - 4.00		-	 1,674,000	<u> </u>	1,674,000
Total Bonds Payable					54,673,125	13,787,000	(10,713,701)	57,746,424
Add: unamortized premium				• •	871,649	 1,000,312	(167,402)	1,704,559
Total Bonds Payable, net				. \$	5 5,544,774	\$ 14,787,312 \$	(10,881,103) \$	59,450,983

Debt service requirements for principal and interest for **Governmental Bonds Payable** in future fiscal years are as follows:

Year	Principal	Interest	Total
2017\$	9,374,178 \$	2,317,042 \$	11,691,220
2018	9,269,185	1,896,535	11,165,720
2019	9,249,430	1,500,056	10,749,486
2020	5,647,108	1,091,694	6,738,802
2021	4,468,615	869,870	5,338,485
2022	3,998,204	692,056	4,690,260
2023	3,367,704	526,844	3,894,548
2024	2,278,000	403,468	2,681,468
2025	1,730,000	326,005	2,056,005
2026	1,438,000	257,263	1,695,263
2027	1,016,000	203,176	1,219,176
2028	900,000	175,378	1,075,378
2029	865,000	149,128	1,014,128
2030	845,000	126,550	971,550
2031	680,000	99,456	779,456
2032	555,000	78,600	633,600
2033	545,000	61,950	606,950
2034	545,000	45,600	590,600
2035	545,000	29,250	574,250
2036	430,000	12,900	442,900
-			
Total\$	57,746,424 \$	10,862,821 \$	68,609,245

The Commonwealth of Massachusetts has approved school construction assistance to the Town. The assistance program, which is administered by the Massachusetts School Building Authority, provides resources for construction costs and debt service interest of general obligation bonds outstanding. The Town is currently receiving annual payments for 64% of eligible costs in relation to the construction of the new Middle School and the renovation and addition to the High School. During 2016, approximately \$3,019,000 of such assistance was received. Approximately \$9,916,000 will be received in future years. Of this amount, \$586,000 represents reimbursement of future long-term interest costs and \$9,330,000 represents reimbursement of approved construction cost and interest costs previously paid.

Bonds Payable Schedule – Enterprise Funds

Projects	Maturities Through	Original Loan Amount	Coupon Rate (%)	Outstanding at June 30, 2015	Issued	Redeemed	Outstanding at June 30, 2016
Golf Course Add: unamortized premium		6,915,500	2.00 - 5.00 \$	2,701,500 \$ 314,768	314,000 \$	(310,500) \$ (54,221)	2,705,000 260,547
Total Golf Course Bonds Payable, net				3,016,268	314,000	(364,721)	2,965,547
Wastewater	2036	28,606,319	0.00 - 4.75	16,093,639	1,569,000	(1,593,048)	16,069,591
Water Add: unamortized premium	2036	25,766,872	2.00 - 5.00	11,332,888 810,683	4,313,547 148,308	(693,781) (108,438)	14,952,654 850,553
Total Water Bonds Payable, net				12,143,571	4,461,855	(802,219)	15,803,207
Solid Waste Transfer Station	2027	8,145,600	0.00 - 4.50	2,276,000		(470,900)	1,805,100
Sandy Neck	2031	1,265,000	4.00	1,065,000		(55,000)	1,010,000
Marinas Add: unamortized premium	2036	3,122,000	3.00 - 5.00	1,764,000	1,008,000 90,143	(165,000)	2,607,000 90,143
Total Marinas Bonds Payable, net				1,764,000	1,098,143	(165,000)	2,697,143
Hyannis Youth and Community Center Add: unamortized premium		25,713,300		10,477,300 720,384	3,320,000 343,699	(4,243,400) (111,417)	9,553,900 952,666
Total Hyannis Youth and Community Cent	er Bonds Paya	able, net		11,197,684	3,663,699	(4,354,817)	10,506,566
Airport	2031	730,000	2.00 - 4.12	620,000	<u> </u>	(30,000)	590,000
Total Bonds Payable, net			\$	48,176,162 \$	11,106,697 \$	(7,835,705) \$	51,447,154

Debt service requirements for principal and interest for **Enterprise Bonds Payable** in future fiscal years are as follows:

Year	Principal	Interest	Total
2017\$	4,580,472 \$	2,212,820 \$	6,793,292
2018	4,261,965	1,548,650	5,810,615
2019	4,348,498	1,307,620	5,656,118
2020	3,951,298	1,142,814	5,094,112
2021	3,804,463	998,772	4,803,235
2022	3,549,219	859,602	4,408,821
2023	3,598,967	729,479	4,328,446
2024	3,523,222	600,725	4,123,947
2025	3,421,492	480,517	3,902,009
2026	3,189,288	366,817	3,556,105
2027	3,167,620	274,013	3,441,633
2028	2,000,497	185,260	2,185,757
2029	1,254,708	131,546	1,386,254
2030	1,236,823	102,584	1,339,407
2031	1,175,549	72,160	1,247,709
2032	692,445	48,057	740,502
2033	704,454	32,737	737,191
2034	281,002	20,646	301,648
2035	284,066	13,625	297,691
2036	267,197	6,544	273,741
-			
Total\$_	49,293,245 \$	11,134,986 \$	60,428,231

The Town is scheduled to be subsidized by the MCWT on a periodic basis for principal in the amount of \$941,328 and interest costs for \$337,100 for a portion of the enterprise fund debt. The principal subsidies are guaranteed.

The Town issued \$5,245,000 in General Obligation Refunding Bonds on June 21, 2016, for an advance debt refunding of \$5,375,000 in outstanding General Obligation Bonds originally issued in 2008. The \$5,375,000 of

General Obligation Bonds was refunded by placing the proceeds of the refunding bonds plus a net bond premium for a total of \$5,740,080 in an irrevocable trust to refund the outstanding debt when they are callable on June 15, 2018. As a result, the refunded bonds are considered defeased and the liability has been removed from the statement of net position. The reacquisition price exceeded the net carrying amount of the old debt by \$2,454,045. This refunding was undertaken to reduce total debt service payments by \$536,776 and resulted in an economic gain of \$588,662.

The Town is subject to various debt limits by statute and may issue additional general obligation debt under the normal debt limit. At September 15, 2016, the Town had the following authorized and unissued debt:

	Amount
	Authorized
Purpose	Unissued
Sewer Projects	\$11,192,246
Water Projects	5,094,480
Guardrail, Sidewalks & Road Improvements	910,000
Airport Projects	28,446,215
Golf Projects	565,000
Community Services Projects	2,171,000
Dredging Projects	1,488,000
School Projects	4,961,000
Solid Waste Transfer Station	2,000,000
Administration Projects	363,000
Marstons Mills Parking Lot Acquisition	290,000
Fish Run Reconstruction	500
Total Authorized Unissued	\$57,481,441

C. General Obligation Debt – Credit Ratings

Several factors determine the amount of debt the Town can afford to maintain. These include the strength of the local economy, the wealth of the community, and the amount of debt sold by overlapping jurisdictions (Barnstable County Government, Cape Cod Regional Transit Authority and Cape Cod Regional Technical High School), future capital needs, the local economy as well as the Town's financial position, administrative capabilities, and level of planning. These factors, as well as many others, influence the Town's bond rating - an evaluation of the Town's ability to repay debt as determined by the rating agencies. System improvements such as programmatic budgeting, an administrative code, policy planning based on a ten-year forecast, and financial fund management have helped the Town's position.

In February 2017, the Town Treasurer conducted a \$11.259 million bond sale, which required a rating to be assigned to it prior to the sale. In their most recent bond rating analysis dated February 7, 2017 Standard & Poor's (S&P) affirmed the 'AAA' rating on the Town's outstanding debt with a stable outlook. S&P cited the following reasons for their rating and stable outlook:

• Very strong economy, with access to a broad and diverse metropolitan statistical area (MSA);

- Very strong management, with "strong" financial policies and practices under our Financial Management Assessment methodology;
- Strong budgetary performance, with a slight operating surplus in the general fund and an operating surplus at the total governmental fund level in fiscal 2016;
- Very strong budgetary flexibility, with an available fund balance in fiscal 2016 of 23% of operating expenditures;
- Very strong liquidity, with total government available cash at 24.0% of total governmental fund expenditures and 3.7x governmental debt service, and access to external liquidity we consider strong;
- Strong debt and contingent liability profile, with debt service carrying charges at 6.4% of expenditures and net direct debt that is 48.9% of total governmental fund revenue, as well as low overall net debt at less than 3% of market value and rapid amortization, with 78.1% of debt scheduled to be retired in 10 years, but a large pension and other postemployment benefit (OPEB) obligation and the lack of a plan to sufficiently address the obligation; and
- Strong institutional framework score.

The descriptor used by S&P for this rating is "Prime Investment Grade". Strong bond ratings generally reduce interest expense to service the debt as well as bond insurance costs. Additionally, strong bond ratings enhance the prestige of the community within the financial markets and are a vote of confidence by the rating agency that the municipality is pursuing a sound financial course. This AAA rating reflects sound credit quality with associated very low risk and should result in future low borrowing costs for the Town. In August 2007, Moody's Rating Services upgraded its bond rating for the Town from Aa3 to Aa1, a two-step increase.

It is important to understand that no single ratio or factor determines a General Obligation Bond rating or fully encompasses the fiscal health of a municipality. The factors must be taken as a group. Other debt ratios, as well as economic and administrative factors account for the differences in ratings. A growing community can afford more debt than a non-growth community, and a community with more income wealth can afford more debt than a poorer community can.

Generally, bond ratings do not change suddenly but respond more to long-range trends. The stable outlook reflects S&P's view of the town's very strong budgetary flexibility and liquidity, further supported by a strong economy. As such, they do not expect to change the rating in the next two years. However, dramatic changes are key indicators of fiscal health and can result in an immediate rating change. In projecting bond ratios, it is important to review the sensitivity of the ratios to changes in the economy.

Extract from Standard & Poor's Credit Profile of Barnstable Printed February 12, 2016

"The stable outlook reflects our view of the town's very strong budgetary flexibility and liquidity, further supported by a very strong economy. As such, we do not expect to change the rating in the next two years. Although Barnstable maintains a strong debt and liability profile, and despite pension and OPEB costs that are expected to continue rising through the medium term, we do not anticipate weakened performance or liquidity measures, due to the town's very strong management practices. Steady economic development in recent years should aid tax base stability and provide additional tax revenue. While unlikely, a prolonged period of structural imbalance resulting in significant deterioration of available reserves could result in a lower rating."

D. General Obligation Debt - Limitations

There are legal limitations that govern the issuance of municipal debt. Under Massachusetts statutes, the debt limit of the Town of Barnstable is 5 percent of the valuation of taxable property as last equalized by the State Department of Revenue. The Town can authorize debt up to this amount without State approval. The current debt limitation for the Town of Barnstable is close to \$674 million, which is significantly higher than the Town's outstanding general obligation debt that is subject to this limitation. It should be pointed out that much of the existing Town debt does not factor into this limitation. There are categories of general obligation debt that are exempt from, and do not count against the debt limit such as certain school bonds, water bonds, solid waste disposal facility bonds, and water pollution abatement revenue bonds.

Town's Equalized Valuation (EQV)	<u>\$13,476,184,100</u>
Debt Limit – 5% of EQV	\$673,809,205
Less:	
Outstanding Debt Applicable to Limit	\$72,346,608
Authorized and Unissued Debt	<u>\$33,058,354</u>
Legal Debt Margin	<u>\$568,404,243</u>

E. General Obligation Debt - Affordability

Debt analysis, future debt projections and general obligation bond ratios help determine the amount of general obligation debt the Town can afford to issue and support. The table on the following page illustrates the various debt ratios compared to national medians reported by Standard and Poor's. As shown, Barnstable's ratios show moderate amounts of debt. There are a number of factors not directly under the control of the Town that influence key General Obligation (G.O.) bond ratios. Several of the G.O. bond ratios are very sensitive to these uncontrollable factors, and the assumptions used to project their growth can play an important role in future debt policy. Some of these factors are:

Overlapping Debt. Overlapping debt is the G.O. debt that is issued by other government entities whose jurisdictions include the citizens of Barnstable. The Town also has to be aware of the debt management practices of overlapping jurisdictions. The primary entities that have an impact on the Town are Barnstable County, Cape Cod Regional Vocational Technical School District and the regional transportation authority. Overlapping debt combined with the Town's own direct debt is a true measure of the G.O. debt burden placed on the citizens. To determine an issuer's overall G.O. debt burden, overlapping debt is added to the issuer's own outstanding G.O. debt. If other overlapping jurisdictions pursue aggressive capital improvements programs, some of the Town's debt ratios will increase. Therefore, it is important to be aware of not only our G.O. debt issuance plans, but also those of other surrounding jurisdictions.

<u>Jurisdiction</u> Barnstable County	Debt <u>Outstanding</u> \$ 25,043,156	Applicable <u>Percentage</u> 17.40%	Share of Overlapping <u>Debt</u> \$ 4 ,357,509
Barnstable Fire District	1,070,000	100.00%	1,070,000
Centerville-Osterville-Marstons Mills Fire Dist.	2,965,293	100.00%	2,965,293
Cotuit Fire District	1,510,000	100.00%	<u>1,510,000</u>
Subtotal overlapping debt Town direct debt Total direct and overlapping debt			9,902,802 <u>59,450,983</u> <u>\$ 69,353,785</u>

Property Assessments. Several key debt ratios use property valuations in the calculation of debt burden. If the Town's property values were to rise, debt ratios will continue to improve.

Town of Barnstable Debt Ratios

Current Status	<u>Criteria</u>
0.13876%	Direct Debt - General fund debt as a % of the town's FY16 equalized property valuation as calculated by the state. Formula – Overall general fund debt ÷ Equalized valuation
	Standard & Poor's rates this as low (favorable)
7.30%	Municipal Debt Burden – Current Year Definition - Town's general fund debt service ÷ Total general fund expenditures
	Standard & Poor's rates this as moderate
\$1,315	Net Direct Debt Per Capita Definition – Governmental fund net debt ÷ Town population
	Standard & Poor's rates this as low (favorable)
\$ 298,192	Per Capita Market Value Definition – Equalized valuation ÷ Population Standard & Poor's rates this as very high (favorable)

F. Administrative Polices In Relation To Debt

This section provides policies governing the management of debt for the Town that are included in the Town's Administrative Code.

Debt Refinancing

An advance refunding of outstanding debt shall only be considered when present value savings of at least 3% of the principal amount of the refunded bonds are produced, unless: (1) a debt restructuring is necessary or (2) bond covenant revisions are necessary in order to facilitate the ability to provide services or to issue additional debt. The Town, in collaboration with its Financial Advisor, continually monitors municipal bond market conditions to identify refinancing opportunities. An analysis shall be conducted when necessary to determine whether debt financing, cash purchase, or leasing is the most cost effective method of financing for the Town.

General Obligation Debt

1. All debt shall be financed within the limitations of Proposition 2½ with the exception of debt related to enterprise funds, gifts, and betterments. The requirements for such financing shall be an expenditure of at least \$250,000 and a useful life in excess of five years.

2. The term of long-term debt generally shall not exceed the expected useful life of the capital asset being financed and, in no case, shall it exceed twenty years.

3. The ratio of Net Debt (Total outstanding Town of Barnstable General Obligation debt less reimbursements) to Total Assessed Valuation shall not exceed 1.5%. This excludes debt of overlapping jurisdictions.

The debt-to- assessed value ratio for the Town of Barnstable is 0.82%.

4. The ratio of Debt Service to Total Expenditures (operating expenditures and debt service combined) shall not exceed 15%.

The Town's debt coverage ratio is 7.33%.

5. The Town shall target a Standard and Poor's (S&P) debt to income ratio of 8%. The S&P ratio is calculated by dividing Overall Net Debt per Capita by Income per Capita.

The Town's debt-to-income per capita ratio is 6.75%.

6. Current revenue should be committed annually to provide sufficient "Pay-as-you-go" financing so that at the end of five years, annual contributions from current revenues amount to 10% of new debt to be issued.

The Town currently exceeds this requirement by a significant margin. The Town intends to spend over \$19 million in the next five years as "pay-as-you-go" financing and anticipates financing about \$35 million in capital with new debt issues resulting in a 35/65 ratio.

7. Excess appropriated bond issues shall be placed into a "bond repayment fund account" at the end of a project completion. The only purpose of the "bond repayment fund account" shall be 1) to make bulk principal pay-downs against general bond debt, or 2) to be used to pay down the principal on any bond issue at the time of refinancing as provided for in Section 1.04C herein.

The Town currently has no balance in this fund.

2018 CIP - Debt Position Analysis

Capital Trust Fund

A Capital Trust Fund has been established for the purpose of financing debt service for recommended Capital Improvements Program projects, as contained within the Town's five-year capital improvements plan.

- 1. The Capital Trust Fund will be funded through a general operation set aside of at least \$1.9 million annually. The estimated commitment for FY 2018 is approximately \$8.6 million. This is expected to be repeated for the next 5 years.
- 2. The Capital Trust Fund shall not be utilized for any purpose other than that stated herein.
- 3. The criteria for reviewing capital project eligibility for Capital Trust Fund borrowing include the following:
 - a. The capital project shall have a financing term of 20 years or less,
 - b. The capital project shall have a minimum project cost of \$250,000,
 - c. The capital project is approved by the Town Council for funding through an appropriation and loan order submitted by the Town Manager.
- 4. The Capital Trust Fund will have a debt service restriction on the fund, such that debt service estimates from authorized loan orders shall not exceed, at any one time, more than 80% of the amount in the fund as of the close of the fiscal year prior to the next debt service authorization, unless recommended by the Town Manager.
- 5. The Capital Trust Fund shall otherwise function in accordance with related financial policies of the Town.

G. Debt Summarized

A responsible debt management program is an integral part of municipal finance. A Town's debt must be structured to reflect the underlying, long-term economic prospects of the community. There are statutory requirements and market forces at work to regulate a community's ability to borrow. Continuing disclosure, as required on an annual basis to the bond markets, provides a powerful incentive for a municipality to keep its financial house in order. This analysis has emphasized the importance of credit ratings because, in effect, these are municipal finance report cards. A good credit rating should be guarded jealously, since it is not easily obtained, but can be lost quickly without vigilance and sound financial management.

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PART VIII – DETAILED DESCRIPTIONS OF DEFERRED PROJECTS

Enterprise Fund Projects

Airport Enterprise Fund

PROJECT: AIR-18-6

DEPARTMENT PRIORITY: 6 of 15

Project Working Title: Runway 24 Departure End Safety Area (Engineered Material Arresting System (EMAS) or Runway SAFE System) Reconstruction or Replacement

Project Location: 480 Barnstable Road, Hyannis, MA 02601

Project Description: The original Runway 6-24 Engineered Material Arresting System (EMAS) bed was installed in 2003 to prevent concerns related to aircraft overshoots on runways that do not meet FAA Runway Safety Area (RSA) requirements, to prevent loss of life or injury, and minimize aircraft and property damage. The installation on Runway 6-24 primarily consists of light weight cellular concrete blocks with a composite material lid that was installed in 2013. A field strength test and feasibility study will be completed in 2018 as part of the comprehensive Airport Layout Plan/FAA Master Plan Update project to determine whether it should be replaced or repaired due to continued deterioration. Exact costs will not be available until 2018.

Project Justification: The Barnstable Municipal Airport (BMA) EMAS is a "first generation" system with a projected 10-year lifespan originally constructed in 2003. The BMA was able to extend the life of the existing bed by installation of 68 new concrete blocks and the new top board in 2013. Unfortunately, the weather and sea gull damage has apparently caused the system to deteriorate at a faster than normal rate. The 2018 project to conduct an Airport Master Plan update and Airport Layout Plan will inspect and examine the status of the existing system to determine whether it should be further repaired or replaced. The original system was essentially a sole source procurement and construction project as there was only one FAA authorized system approved for airports at that time. The 2018 Master Plan Update should determine its future viability and identify the type of replacement system to be installed as there are now more approved systems available if they meet FAA requirements and "Buy American" requirements.

Impact of Denial/Postponement: This is a Federal Aviation Administration (FAA) safety requirement. The EMAS bed may not be better protected and is deteriorating and may increase the risk of failure if used to prevent an overshoot. The BMA will continue to provide frequent maintenance of the EMAS bed costing more money and lack of replacement will increase the risk of loss of life and property.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	TBD
	Total Project Cost	None	\$4,300,000

Basis for Cost Estimates:

Project Estimated Completion Date: 2019/20 Design & Permit (months) 0 Construction (months) 0

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	\$4,300,000	Design, Repair or Replace

Source of Funding: Funding by FAA (90%) (AIP and /or FAA Discretionary Funds), MassDOT AD (5%), and local share (5%) from airport enterprise funds.

Operating Budget Impact now or in future: To be determined





Engineered Material Arresting System (EMAS) or Runway SAFE System

Project Working Title: Design and Construct Snow Removal Equipment (SRE) Vehicle Storage Building

Project Location: 480 Barnstable Road, Hyannis, MA 02601

Project Description: Design and construct a new Snow Removal Equipment (SRE) and vehicle storage building of approximately 10,000 square feet to provide additional covered parking space to accommodate the needs of the Barnstable Municipal Airport (BMA). The new storage building would be constructed of metal with a concrete slab foundation and with a 24 foot wide by 22 foot high door for vehicle and plow ingress and egress, or similar pre-fab type construction depending upon structure life span and cost. The new building would be located on the east side of the airport.

Project Justification: The existing Aircraft rescue and firefighting (ARFF) building provides insufficient vehicle garage bays and storage capability to meet the storage and parking requirements for all airport SRE and other operational vehicles. Currently, we must store many of our vehicles, plows and sanders, and specialty equipment outside in the elements which contributes to an already corrosive operating environment and shortens their useful life. We currently have limited covered space in the ARFF building, and in a portion of the Hangar II bay – the majority of which is leased to Cape Air, who have expressed a desire to lease the entire hangar. The new building would be of metal construction, built on a slab, with no heat and no water, or similar pre-fab type construction. It would have electrical power, vehicle exhaust vents if necessary, and lights only - to be built at minimal cost for "cold" storage. This new facility would help preserve our very costly vehicles.

Impact of Denial/Postponement: Impact of denial will shorten the useful life of the very costly airport vehicles needed to maintain operations and certification requirements; it will increase the airport's annual maintenance costs, and it will increase the airport's vehicle replacement costs. Only certain SRE vehicles are eligible for FAA and MassDOT grant funding assistance. All other vehicle replacement costs will adversely affect the Airport Enterprise Fund Reserves.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$60,000
	Construction or Acquisition	None	\$340,000
	Project Contingency	None	included
	Total Project Cost	None	\$400,000

Basis for Cost Estimates: Prior construction projects, engineering consultant estimates, DPW estimates, industry cost estimates, and FAA and MassDOT consultations, etc.

Project Estimated Completion Date: 2018/19 Design (months) Construction (months)

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	\$400,000	Design and Construct

Source of Funding: Airport Enterprise Funds (20%) and reimbursable funding by MassDOT AD (80%) if available Otherwise, project may be funded by airport reserves or deferred indefinitely.

Operating Budget Impact now or in future: To be determined

Project Working Title: Design and Replace Mo-Gas and Diesel Fuel Con-Vault, Gas Boy & Alarm

Project Location: 480 Barnstable Road, Hyannis, MA 02601

Project Description: Design and replace the circa 1997 era Mo-Gas (low lead gasoline) and Diesel fuel Con-Vault (concrete encased fuel tanks), Gas Boy (computerized dispensing system) and the associated alarms that have reached the end of their useful lives. The existing concrete structure and equipment is deteriorating and should be replaced with a new structure to provide proper protection and that meets current safety and security standards.

Project Justification: The Con-Vault encases two (2) 4,000 gallon above ground fuel tanks (Mo-Gas and Diesel) that is used by all Airport vehicles and by all Airport tenant vehicles on a reimbursable basis. This service is provided to tenants as a convenience since their vehicles are not licensed to operate outside the airport environment. Tenants are charged for the cost of the fuel plus a small additional fee to cover airport overhead costs. The Gas Boy is a computerized "gas station-type pump" that monitors usage by each vehicle authorized to use the pump, with all data transmitted to the Airport finance department for recording and billing purposes. The alarm is monitored by the operations staff.

Impact of Denial/Postponement: Impact of denial will allow the Con-Vault to deteriorate to the point where it would have to be decommissioned before encountering any external fuel leakage or spills and the subsequent HAZMAT clean-up costs. Shutting the system down would be a major inconvenience and will have a significant impact on lost time as employees would have to depart the airport to obtain fuel, and would cost a significant amount of money to bring vehicles up to code to operate on the highways. If low lead and diesel fuel has to be trucked in to a temporary fueling facility, it would significantly increase the risk of a fuel spill.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$10,000
	Construction or Acquisition	None	\$140,000
	Project Contingency	None	included
	Total Project Cost	None	\$150,000

Basis for Cost Estimates: Prior construction projects, engineering consultant estimates, FAA and MassDOT consultations, etc.

Project Estimated Completion Date: 2018/19 Design & Permit (months) 0 Construction (months) 0

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	\$150,000	Design and Replace

Source of Funding: Airport Enterprise Funds (20%) and reimbursable funding by MassDOT AD (80%) if available. If MassDOT funds are not available, project may be funded by airport reserves or deferred indefinitely.

Operating Budget Impact now or in future: To be determined



Existing Con-Vault and Gas Boy

Project Working Title: Design and Construct New T-Hangar

Project Location: 480 Barnstable Road, Hyannis, MA 02601

Project Description: Design and construct a new 6-bay nested T-hangar to provide additional hangar space to accommodate the needs of general aviation at the Barnstable Municipal Airport (BMA). The T-hangar would be constructed of metal with a concrete foundation and with bi-fold doors for aircraft access to the east ramp.

Project Justification: The recently completed Airport access road and the construction of the new fuel farm mandated the demolition of one of the two airport-owned existing T-hangars, located adjacent to Gate Foxtrot (F). Since this T-hangar serviced Airport users that had to be displaced, the Airport desires to construct a new T-hangar on the East ramp to accommodate this loss of space. In addition, the BMA holds a waiting list for T-hangar space that fluctuates between 25 and 27 aircraft owners waiting for space, and projections for the future of General Aviation at the BMA forecasts an additional demand for hangar space. Revenues generated by the rental of the bays will help offset costs of construction and maintenance.

Impact of Denial/Postponement: Impact of denial will further decrease potential BMA revenues, and will prevent the BMA from meeting the demands of airport users for hangar space.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$50,000
	Construction or Acquisition	None	\$600,000
	Project Contingency	None	included
	Total Project Cost	None	\$650,000

Basis for Cost Estimates: Prior construction projects, engineering consultant estimates, DPW estimates, and FAA and MassDOT consultations, etc.

Project Estimated Completion Date: 2018/19 Design & Permit (months) 0 Construction (months) 0

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	\$650,000	Design and Construct

Source of Funding: Airport Enterprise Funds (20%) and reimbursable funding by MassDOT AD (80%) if available. If MassDOT funds are not available, project may be funded by airport reserves or deferred indefinitely.

Operating Budget Impact now or in future: To be determined



Recently demolished T-Hangar

Project Working Title: Reconstruct Runway 6-24

Project Location: 480 Barnstable Road, Hyannis, MA 02601

Project Description: Runway 6-24 (circa 1991) has exceeded its pavement's 20-year design life and will, therefore, be programmed by the FAA and State for a full reconstruction. This project will include the design and reconstruction of the full length (5,425 feet) of the runway, in place, including in-pavement lighting and edge lights, and will extend the design life of the pavement for another two decades, and will also include other miscellaneous related airfield improvements

Project Justification: Runway pavements are given a 20-year useful life by the FAA, after which time a major reconstruction is justified. Runway 6-24 will have exceeded its useful life by 2020, at which time it is scheduled for a rebuild. This will avoid hazards to flight safety from failing pavement, and potential aircraft damage. Crack sealing and crack repairs have extended its useful life until now but further deterioration poses serious safety risks that must be addressed. The intersection of Runways 6-24 and 15-33 will be reconstructed during the 2017 project to rehabilitate Runway 15-33; and the remaining overall length of approximately 4,700ft will be accomplished with this project.

In June of 2013, the MassDOT Aeronautics Division completed a statewide pavement management report that shows the majority of Runway 6-24 as having a pavement condition index (PCI) of 54 to 73 depending upon location, with 0 being the worst condition, to 100 being the best condition. A PCI of 55 to 70 requires major rehabilitation. A new MassDOT pavement condition index report is being conducted in 2017/2018 to update and confirm the earlier study.

Impact of Denial/Postponement: To deny or postpone funding of this capital project will have flight safety consequences with regard to airport operations; and will increasingly affect the ability of pilots to operate on the runway, due to the potential for aircraft damage and lessened flight safety. Eventually the runway would be unusable and the Airport would be in violation of their Grant Assurances and not in compliance with Airport Certification requirements with resultant loss of operational capability.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$650,000
	Construction or Acquisition	None	\$6,350,000
	Project Contingency	None	included
	Total Project Cost	None	\$7,000,000

Basis for Cost Estimates: Prior construction projects, engineering consultant estimates, FAA and MassDOT consultations, etc.

Project Estimated Completion Date: 2020/21 Design & Permit (months) 0 Construction (months) 0

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	None	
2020	\$7,000,000	Design, Permitting & Construction

Source of Funding: Reimbursable funding from FAA (90%), MassDOT Aeronautics (5%) and local share (5%)

Operating Budget Impact now or in future: Routine maintenance would stay the same.



2016 Airport Aerial Photo

Project Working Title: Replace Airport Perimeter Fence

Project Location: 480 Barnstable Road, Hyannis, MA 02601

Project Description: The existing perimeter fence line, except for those sections recently installed as part of construction projects within the past five (5) years, has reached the end of its useful lifespan to serve as effective security and wildlife barriers and must be replaced.

Project Justification: The existing perimeter fence line was installed in phases over many years to first meet FAA airfield and flight safety requirements and then subsequent to the September 11, 2001 terrorist incident, the TSA has required all FAA FAR Part 139 airports to have a security fence along the entire perimeter that is 8 feet tall with 3 strands of barbed wire along the top, with a 10-foot clear buffer zone on each side of the fence line if possible.

The FY2018 project Air-18-4 when completed will identify specific areas for replacement and/or relocation due to vegetation regrowth that may not be able to be "managed" and will also indicated where the fence line may have to be relocated to have sufficient space to allow the required 10-foot clear buffer zones on both sides of the fence and remain within the airport property lines.

The Airport encompasses approximately 646 acres of land, more or less. The results of a new land survey also identified the airport perimeter length at approximately 41,145 linear feet, more or less, and associated fence lines.

Impact of Denial/Postponement: Denial will continue to affect airport personnel's ability to monitor and maintain a secure fence line on a daily or more frequent basis; it will increase the probability of incurring a security violation from the TSA.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$66,700
	Construction or Acquisition	None	\$600,000
	Total Project Cost	None	\$666,700

Basis for Cost Estimates: Prior construction projects, engineering consultant estimates, industry cost estimates, and FAA and MassDOT consultations, etc

Project Estimated Completion Date: 2020 Design & Permit (months) 0 Construction (months) 0

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	None	
2020	\$666,700	Design, Permitting and Clearing

Source of Funding: FAA AIP reimbursable Grant funds at 90%; MassDOT at 5%; BMA at 5%;

Operating Budget Impact now or in future: To be determined

Project Working Title: Replace Snow Removal Equipment (SRE) and Aircraft Rescue and Fire Fighting (ARFF) Equipment (ASV Skid Steer Plow; and Primary First Response Rescue and Firefighting Truck)

Project Location: 480 Barnstable Road, Hyannis, MA 02601

Project Description: Snow Removal Equipment (SRE) and Aircraft Rescue and Fire Fighting (ARFF) equipment must be maintained regularly to better serve their function and quickly and efficiently respond to airfield emergencies; and if certain FAA approved equipment is eligible for replacement with FAA grant assistance, SRE and ARFF vehicles and equipment must be evaluated and replaced as necessary. This project is to replace the 2004 ASV Diesel Skid Steer Plow for use on the EMAS system in FY2020 and is pending MassDOT ASMP funding; and the 2006 E-One Titan Primary Aircraft Rescue and Firefighting vehicle with tools and equipment in FY2021 and is an approved FAA capital planning project.

Project Justification: With approximately 1.5 million square feet of pavement, that includes two active runways, several aircraft taxiways and aircraft parking ramps that must be maintained, including snow removal; and to maintain our FAA FAR Part 139 airport certification, certain equipment must be available and in good condition to perform as required.

Impact of Denial/Postponement: The airport may not be able to meet mandated FAA FAR Part 139 certification requirements and would be decertified; the airport would not be able to maintain operations, nor remove snow in order to keep the runways open and safe for operation; the airport would be unable to provide a safe operation for the continuation of commerce as part of the national airspace plan; the airport would be unable to respond to airfield emergencies, with the potential for decreased flight safety, increased property damage, and would unnecessarily endanger lives and property.

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	None	\$900,000
	Total Project Cost	None	\$900,000

Basis for Cost Estimates: Recent similar purchases, State Bid List, FAA acquisitions, manufacturer quotes, etc.

Project Estimated Completion Date: 2020/21 Design & Permit (months) 0 Construction (months) 0

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	None	
2020	\$100,000	Replace 2004 ASV Diesel Skid Steer Plow
2021	\$800,000	Replace 2006 Primary First Response Fire Truck, Tools and Equipment

Source of Funding: MDOT ASMP reimbursable Grant funds at 80% and BMA funds at 20% for the Skid Steer Plow; and FAA AIP reimbursable Grant funds at 90%; MassDOT at 5%; BMA at 5% for Fire and Rescue Truck.

Operating Budget Impact now or in future: Replacement Vehicles



ASV Diesel Skid Steer Plow and the existing 2006 Titan fire truck

Project Working Title: Design, Realign and Reconstruct a Portion of Taxiway Delta and Echo at Runway 15-33 Intersection

Project Location: 480 Barnstable Road, Hyannis, MA 02601

Project Description: This project serves to correct major operational aircraft ground and runway safety area (RSA) deficiencies associated with a portion of taxiway Delta (circa 1998) and taxiway Echo (circa 1980) where they intersect with Runway 15-33.

Project Justification: This reconstruction project for approximately a 1,300 foot by 50 foot portion of Taxiway D (between Taxiway Charlie and Runway 15-33) and the entire 800 foot x 50 foot Taxiway Echo and aircraft engine run-up pit of approximately 54,000 square feet in size, are among the final steps in a multi-year process to modify and bring the airport runways and associated taxiways into compliance with FAA airport design criteria; and to meet the requirements of the FAA Airport Layout Plan and the Airport Master Plan to be completed in FY2018. In June of 2013, the MassDOT Aeronautics Division completed a statewide pavement management report that shows Taxiway Delta as having a pavement condition index (PCI) of 86, with 0 being the worst condition, to 100 being the best condition. A PCI of 85 to 100 requires normally requires only preventative maintenance; and Taxiway Echo as having a PCI of 59. A PCI of 55 to 70 requires major rehabilitation. The project is also subject to the Airport Master Plan Update review and permitting requested under CIP Project Air-18-02.

Impact of Denial/Postponement: Denial or postponement of funding for this project will negatively affect aircraft and airport operations for the airport, and the airport will not be in compliance with FAA airport design criteria.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$300,000
	Construction or Acquisition	None	\$2,700,000
	Project Contingency	None	included
	Total Project Cost	None	\$3,000,000

Basis for Cost Estimates: Prior construction projects, engineering consultant estimates, FAA and MassDOT consultations, etc.

Project Estimated Completion Date: 2021 Design & Permit (months) 0 Construction (months) 0

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	None	
2020	None	
2021	\$3,000,000	Permitting, Design and Construction

Source of Funding: FAA share: 90%, MassDOT AD share: 5% and Airport share: 5%.

Operating Budget Impact now or in future: Routine maintenance would stay the same.

Project Working Title: Environmental Assessment (EA) for FAA Master Plan Projects and Phased Permitting

Project Location: 480 Barnstable Road, Hyannis, MA 02601

Project Description: The Environmental Assessment (EA) concerns the potential environmental impacts associated with various airfield safety improvements proposed at the Barnstable Municipal Airport. The EA will examine a range of alternatives that have the potential to meet safety requirements and outline the potential environmental impacts of each; and any identified permitting requirements will be conducted within the scope of the project. The assessment allows for a systematic elimination of a number of different alternatives assessed, reasons why alternatives may be eliminated and reasons for alternatives that may be carried forward for detailed evaluation. The following identifies various airfield safety improvements at the Barnstable Municipal Airport that could be included in the EA.

- Runway 15/33 Enhancements/Improvements
- Taxiways D and E Safety Improvements
- Taxiway B Safety Improvements
- Airport Security Fence Improvements

Project Justification: The EA will examine the Airport's required FAA Airport Layout Plan (ALP) and Master Plan (per FAA Advisory Circular AC150/5070-6) for their comprehensive long-term plans for airport development particularly in order for all planning projects to be in compliance with Commonwealth of Massachusetts and Federal Environmental regulations.

Development items that improve an airport for the primary purpose of accommodating aircraft operations that would be included in the EA would include the Runway 15/33 enhancements and improvements by the possible extension of approximately 926 feet to provide a better margin of safety for all aircraft using the airport.

The EA will also consider the possible realignment and reconstruction of Taxiways Delta and Echo for required safety enhancements and improvements; and the aircraft maintenance run-up pit and its ability to attenuate aircraft noise on the local environment.

The specific areas for replacement and/or relocation of the airport security fence will be examined due to vegetation regrowth that may not be able to be "managed" and any impacts of possible fence line relocation to have sufficient space to allow the required 10-foot clear buffer zones on both sides of the fence and remain within the airport property lines; and any obstruction removal requirements.

Impact of Denial/Postponement: To deny or postpone funding of this capital project will not allow the Airport to be in full compliance with FAA directives that may have long term financial consequences with regard to receipt of FAA and MassDOT grants, and the airport would not be in compliance with FAA safety directives.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$1,200,000
	Total Project Cost	None	\$1,200,000

Basis for Cost Estimates: Planning and engineering consultant estimates, and FAA and MassDOT consultations.

Project Estimated Completion Date: 2021/22 Design & Permit (months) 0 Construction (months) 0

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	None	
2020	None	
2021	\$800,000	Commence EA Phase 1
2022	\$400,000	Complete Phase 2

Source of Funding: Reimbursable funding from FAA (90%), MassDOT Aeronautics (5%) and local share (5%)

Operating Budget Impact now or in future: To be determined

Project Working Title: Design and Reconstruct a Portion of Taxiway Bravo (B)

Project Location: 480 Barnstable Road, Hyannis, MA 02601

Project Description: As part of the Federal Aviation Administration's (FAA) goals to improve and correct airport layout deficiencies, enhance aircraft safety, and insure compliance with regulatory guidance, this project serves to correct major operational aircraft ground and runway safety area (RSA) deficiencies associated with a portion of taxiway Bravo (circa 1961 and 1985).

Project Justification: This reconstruction project for a 1,600 foot by 50 foot portion of Taxiway B (between the northeast end of the East Ramp and Runway 6-24, not including the Glide Slope Critical Area) is the final step in a multi-year process to modify the East Ramp and its associated taxiways to bring it into compliance with FAA airport design criteria; and to meet the requirements of the FAA Airport Layout Plan and the Airport Master Plan to be completed in FY2018 for the future development of the East Ramp. In June of 2013, the MassDOT Aeronautics Division completed a statewide pavement management report that shows Taxiway Bravo as having a pavement condition index (PCI) of 47 to 65 depending upon location, with 0 being the worst condition, to 100 being the best condition. A PCI of 55 to 70 requires complete major rehabilitation. A new MassDOT pavement condition index report is being conducted in 2017/2018 to update and confirm the earlier study. The project is also subject to the Airport Master Plan Update review and permitting requested under CIP Project Air-18-02.

Impact of Denial/Postponement: Denial or postponement of funding for this project will negatively affect aircraft and airport operations for the future development of the East Ramp, and the airport will not be in compliance with FAA airport design criteria.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$180,000
	Construction or Acquisition	None	\$1,620,000
	Project Contingency	None	included
	Total Project Cost	None	\$1,800,000

Basis for Cost Estimates: Prior construction projects, engineering consultant estimates, FAA and MassDOT consultations, etc.

Project Estimated Completion Date: 2022 Design & Permit (months) 0 Construction (months) 0

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2019	None	
2020	None	
2021	None	
2022	\$1,800,000	Design and Construction

Source of Funding: FAA share: 90%, MassDOT AD share: 5% and Airport share: 5%.

Operating Budget Impact now or in future: Routine maintenance would stay the same.

Golf Enterprise Fund

PROJECT: GOLF-18-1

DEPARTMENT PRIORITY: 1 of 4

Project Working Title: Hyannis Golf Course Restoration

Project Location: 1800 Iyannough Road (Route 132) Hyannis MA 02601

Project Description: Restoration and rehabilitation of the Hyannis Golf Course. The plan calls for the replacement of entire irrigation system. Complete comprehensive bunker rehabilitation is necessary. Installation of forward tee boxes on each hole will ease the difficulty of the golf course and encourage beginners, juniors, women, and seniors to come play. Refurbishment of existing cart paths and installation of new paths where none exist presently. Select tree removal and widening of golf holes will ease the degree of difficulty and speed up play.

Project Justification: The main goal is to protect the asset and keep the business viable. Major golf course features are well beyond their natural life cycle. Infrastructure is deteriorating after 40+ years of use without attention. Heavy local competition gives customers attractive alternative options. Hyannis GC is too difficult for many golfers. Bunkers are in extremely poor condition. Irrigation system is obsolete and inefficient. Failure of a major component of the pump station leaves us with NO water as we only have one (1) pump.

Impact of Denial/Postponement: Each year we delay the project conditions continue to deteriorate and the cost associated with the restoration increases.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	\$216,495	None
	Construction or Acquisition	\$3,350,698	None
	Project Management	\$100,000	None
	Project Contingency	\$510,000	None
	Total Project Cost	\$4,177,193	None

Basis for Cost Estimates: Cost estimates based on the Restoration Business Plan produced by Richard Mandell Golf Architecture using the "recommended restoration option"

Project Estimated Completion Date: 2019 Design & Permit (months) 8 Construction (months) 5

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$4,177,193	Design and Construction

Source of Funding: A combination of general fund, golf enterprise fund and other (Community Preservation Fund (CPC)) funding sources needs to be examined. Post restoration revenue increases can also help offset proje Possible use of Golf Surplus.

Operating Budget Impact now or in future: Over time as the facility is rehabilitated potential customers will find it much more appealing and conducive for their banquet functions and large golf outings. The concession lessee will be able to reach revenue thresholds triggering additional monies to the golf division. The golf course will attract more large golf tournaments and outings, which will also increase revenues.

2018 CIP – Deferred Golf Enterprise Fund Projects



Hyannis Golf Course bunkers and cart paths

PROJECT: GOLF-18-3

Project Working Title: Olde Barnstable Fairgrounds Golf Club Facility Improvements

Project Location: 1460 Route 149, Marston's Mills MA 02648

Project Description: This Phase includes the replacement of the cart barn roof and overhead doors. The wall is failing around the windows and needs rebuilding as part of the window replacement program.

Project Justification: The existing clubhouse and cart barn were constructed in 1991. The cart barn is in desperate need of improvements. This site provides services to 1,100 members and the public. The facility houses a restaurant, pro shop, function room and a large wrap around deck. The cart barn is used to store 80 gasoline powered golf carts. Due to the lack of funding, many of these improvements for both buildings have been deferred and have become urgently needed.

Impact of Denial/Postponement: The cart barn will fall further into disrepair; leakage will compromise the structure of the building. Deferment of maintenance will escalate future maintenance costs. Inability to maintain and protect the town's asset. Loss of members and fee paying guests. Loss of market share to area competition.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$24,460
	Construction or Acquisition	None	\$185,300
	Project Management	None	\$10,192
	Project Contingency	None	\$37,822
	Total Project Cost	None	\$257,774

Basis for Cost Estimates: Architect assisted in-house estimate

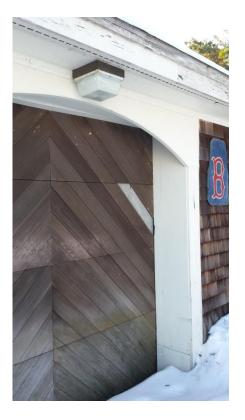
Project Estimated Completion Date: 2018	Design & Permit (months)	3	Construction (months)	3
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Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components	
2018	None		
2019	\$257,774	Cart barn roof replacement, cart barn overhead door replacement, clubhouse carpeting, furniture; and fixtures replacement.	
2020	\$175,000	Replacement of two 1,000 gallon underground fuel tanks and dispensary systems. Cold storage building construction.	
2021	\$750,000	Complete sand bunker renovation & restoration	
2022	\$1,500,000	Replacement of irrigation system.	

Source of Funding: Golf Enterprise Fund Reserves

Operating Budget Impact now or in future: No impact on the operating budget





Olde Barnstable Cart Barn Door And Trim

PROJECT: GOLF-18-4

Project Working Title: Hyannis Golf Course – Facility Improvements and Fixtures Replacement

Project Location: 1800 Iyannough Road (Route 132) Hyannis MA 02601

Project Description: This Phase includes interior painting, furniture and fixture replacement.

Project Justification: The existing maintenance building built in the mid 1970's and is in desperate need of improvements. The building is essential to the entire town golf operation, which provides facilities to over 1,100 members and the public. The large function/banquet facility serves the non-golfing public daily. The building houses a restaurant, pro shop and includes a large exterior deck. The maintenance building houses the turf maintenance equipment and provides staff with crew quarters and restroom facilities.

Impact of Denial/Postponement: The maintenance building will fall further into disrepair. Deferment of maintenance will result in the inability to maintain and protect the town's asset. Loss of members and fee paying guests. Loss of market share to area competition.

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	None	\$1,080,000
	Total Project Cost	None	\$1,080,000

Basis for Cost Estimates:

Project Estimated Completion Date: 2019 Design & Permit (months) 0 Construction (months) 0

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	\$180,000	Interior paint, carpeting, furniture, fixtures
2020	\$500,000	Parking lot expansion, resurfacing , and landscape improvements
2021	\$400,000	New cart Barn, lower restaurant reopened, and new lower deck.

Source of Funding: Golf Enterprise Fund Reserves

Operating Budget Impact now or in future: Over time as the facility is renovated potential customers will find it much more appealing and conducive for their banquet functions and large golf outings. The concession lessee will be able to reach revenue thresholds triggering additional monies to the golf division. The golf course will attract more large golf tournaments and outings, which will also increase revenues.



Hyannis Golf Course Banquet And Restaurant Interior

Sandy Neck Enterprise Fund

PROJECT: SNK-18-1

DEPARTMENT PRIORITY: 1 of 1

Project Working Title: Sandy Neck Beach Park Coastline Stabilization

Project Location: 425 Sandy Neck Road West Barnstable, MA 02668

Project Description: Design of a relocated parking area and beach access roadway as well as analysis of offsite parking.

Project Justification: A detailed analysis of the long-term viability of the Sandy Neck beach parking and supporting facilities was completed as part of a grant from the Massachusetts Office of Coastal Zone Management (CZM) in the fall of 2016. The analysis demonstrated that in order to provide the potential for long-term, protection to the built infrastructure and maintain the viability of the parking, a relocation of the parking area was the most viable. In order to supplement the information contained in the report this request will explore the possibility of provision of off - site environmentally suitable sites for parking. The intent is to have the project designed so that when environmental conditions dictate. The project could be quickly moved to the construction stage.

Impact of Denial/Postponement: Without a long-term solution, the beach will continue to erode and continue to reduce the parking area and cause concern about the surviving septic system and the use of the beach itself for the public.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	\$376,000	None
	Total Project Cost	\$376,000	None

Basis for Cost Estimates: Environmental engineering cost estimate

Project Estimated Completion Date: 2018 Design & Permit (months) 12 Construction (months) 0

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$376,000	Design and Permitting

Source of Funding: Possible Grant funding from Coastal Zone Management (CZM) for a part of the cost



Sandy Neck Sand Dunes

2018 CIP - Deferred Sandy Neck Enterprise Fund Project

Marina Enterprise Fund

PROJECT: MAR-18-1

DEPARTMENT PRIORITY: 1 of 1

Project Working Title: Bismore Park Bulkhead Improvement Design

Project Location: Hyannis Harbor adjacent to Ocean Street Hyannis, MA 02601

Project Description: Design and construction for repair and replacement of existing steel bulkhead and associated capping, adjacent walkways and all affected utilities.

Project Justification: This harbor area is the "hub" of marine activity in the Town of Barnstable. Considerable year round commercial anglers use the bulkhead, recreational boaters use the many docking opportunities and many thousands of tourists use the "promenade" to enjoy restaurants and the artist community. The bulkhead experienced a partial collapse in the 1990's and the reasonable life expectancy of those repairs is ending. Future planning of a multitude of projects in the area depends upon a solid bulkhead.

Impact of Denial/Postponement: Lack of repair and replacement of the bulkhead could result in a catastrophic failure that would disrupt business interests and tourist access. Obviously, this is not an acceptable situation.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$175,000
	Construction or Acquisition	None	\$3,852,000
	Project Management	None	\$423,500
	Project Contingency	None	\$596,750
	Total Project Cost	None	\$5,047,250

Basis for Cost Estimates:

Project Estimated Completion Date: 2020 Design & Permit (months) 0 Construction (months) 18

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	\$5,047,250	Project Design, Construction & Project Management

Source of Funding: Potential Commonwealth of Massachusetts Seaport Economic Council, General Fund and Marina Enterprise Fund Reserves









Bismore Park Bulkhead

2018 CIP - Deferred Marina Enterprise Fund Project

Water Supply Enterprise Fund

PROJECT: WS-18-7

Project Working Title: Interconnections with other water systems.

Project Location: Hyannis Water System

Project Description: The final design, permitting, agreement development and construction of upgraded, permanent interconnections with surrounding public water supply systems.

Project Justification: This project is needed to ensure water supply availability for the Hyannis Water System's customers in case of major mechanical or electrical failures at water pumping or treatment facilities or well contamination issues.

Impact of Denial/Postponement: The water supply system for Hyannis will not have the redundancy it needs to ensure sufficient water volume, especially during the high demand summer months.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$70,000
	Construction or Acquisition	None	\$620,000
	Project Management	None	\$53,000
	Project Contingency	None	\$62,000
	All Other Costs	None	\$135,000
	Total Project Cost	None	\$940,000

Basis for Cost Estimates: Experience with previous and current similar projects.

Project Estimated Completion Date: 2019 Design & Permit (months) 6 Construction (months) 12

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	\$940,000	Design, permitting, agreement development and construction

Source of Funding: Water Enterprise Fund Reserves

Operating Budget Impact now or in future: The impact on the operating budget of these small pump station additions is minimal. The water purchase impact is handled via the decision package procedure during the FY18 operating budget evaluation process.

Project Working Title: New Well Exploration Program

Project Location: Town of Barnstable

Project Description: To continue the on-going new well exploration program with the permitting, designing and construction of new wells for the Hyannis Water System. This capital request is for the third of four phases of the new well exploration program. The first phase consisted of exploratory test wells, environmental notifications, evaluations and recommendations. The second phase dealt with DEP new source approvals, 8" test well construction, and 5 day pumping tests. This third phase will consist of the design and permitting of the new well buildings and appurtenances with all environmental impact reporting requirements. The fourth phase will be the construction phase. A project engineer, partially funded out of this program, will provide project management and oversight.

Project Justification: Water quality study results and recent UCMR3 sampling and testing indicated that seven of the DPW's twelve wells have water quality issues (1,4 Dioxane, iron and manganese) that cannot be addressed with our current treatment systems. As a result, these seven wells are needing to be replaced, or have additional treatment added to them.

Impact of Denial/Postponement: The ability to provide the ratepayers of the Hyannis Water System with the highest possible water quality will continue to deteriorate and the redundancy of water pumping capacity will diminish.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$475,000
	Construction or Acquisition	None	\$1,766,000
	Project Management	None	\$64,000
	Project Contingency	None	\$250,500
	Total Project Cost	None	\$2,555,500

Basis for Cost Estimates: Consultant cost estimates.

Project Estimated Completion Date: 2018 Design & Permit (months) 6 Construction (months) 18

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	\$2,555,500	Design & Permitting Construction well A
2020	\$36,000	Project Management
2021	\$2,000,000	Construction well B
2022	\$38,000	Project Management

Source of Funding: Water Enterprise Fund Reserves

Operating Budget Impact now or in future: It is expected that some moderate financial impact on the operating contract will occur after FY2019 due to slight increases in utility and maintenance costs. The dollar amount will be determined in FY 2018.

2018 CIP – Deferred Water Supply Enterprise Fund Projects

Project Working Title: Barnstable Road Water Main Upgrade

Project Location: Barnstable Road, Hyannis

Project Description: To construct the needed water main upgrade on Barnstable Road from Main Street to Lewis Street.

Project Justification: This project was recommended by Weston & Sampson Engineering, Inc. in their April 2007 Master Plan due to deficient fire flows. This project will ensure the long term ability of the Hyannis Water System to increase drinking water quality and provide sufficient fire readiness protection in the area to support economic growth.

Impact of Denial/Postponement: The water quality and fire flow capacity in this area will continue to deteriorate, impacting and limiting water supply availability for existing and future customers, and during emergencies.

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	None	\$934,150
	Project Contingency	None	\$164,850
	Total Project Cost	None	\$1,099,000

Basis for Cost Estimates: Cost estimates based on previous water works project experience.

Project Estimated Completion Date: 2019 Design & Permit (months) 0 Construction (months) 18

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	\$1,099,000	Construction

Source of Funding: Water Enterprise Fund Reserves

Water Pollution Control Enterprise Fund

PROJECT: WPC-18-5

Project Working Title: South Street Sewer Rehabilitation

Project Location: South Street, Hyannis, MA 02601

Project Description: This request serves as a placeholder for construction phase of a project currently in design to relining or replace the South Street sewers and laterals.

Project Justification: This is the second phase of this project, following up on the design phase. The sewers on South Street were installed in 1935 in 3-foot sections of clay pipe. Increasingly, the pipe has been suffering from cracks and root intrusion. As root intrusion progresses, the likelihood of large breaks and sewer collapse increases. By proactively relining or replacing the South Street sewer, the Town will avoid a pipe collapse that could cut off sewer service to a large number of properties.

Impact of Denial/Postponement: Denial of this project would put the South Street sewer system in serious jeopardy. This stretch of road, along with other sewers feeding into this road, would risk losing sewer service in the event of a major pipe failure. The South Street sewer system serves a large portion of town including Main Street and Sea Street.

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	None	\$670,000
	Project Management	None	\$65,000
	Project Contingency	None	\$65,000
	Total Project Cost	None	\$800,000

Basis for Cost Estimates: In-house estimate based on prior relining projects. An updated cost estimate can be expected after the design phase of this project.

Project Estimated Completion Date: 2019 Design & Permit (months) 1 Construction (months) 12

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	\$800,000	Construction

Source of Funding: Water Pollution Control Enterprise Fund Reserves

Operating Budget Impact now or in future: Normal levels of preventative maintenance would continue with no impact on operating budget or staffing.





South Street Internal View of Pipe Corrosion And Root Intrusion

Project Working Title: Septage Building Construction

Project Location: 617 Bearse's Way, Hyannis, MA 02601

Project Description: Construction of recommended improvements to the Water Pollution Control Facility (WPCF) septage building and solids handling process. This request serves as a placeholder until the evaluation and design are complete.

Project Justification: The WPCF's solids handling process and sludge processing building (septage building) are currently being evaluated as a result of a 2014 CIP request. The septage building was built in 1990 and is at the end of its design life. The building processes 12,000,000 gallons of septic waste, 11,000,000 gallons of sludge, and 1,000,000 gallons of grease per year. The septage building is a critical component of the wastewater treatment process. Improvements will be made to the mechanical equipment, piping, electrical components and structure and will increase the efficiency of the sludge thickening process possibly resulting in savings on sludge disposal costs.

Impact of Denial/Postponement: If denied, the septage building will continue to operate beyond its expected design life, using inefficient technologies and expensive sludge disposal methods. Working conditions will continue to deteriorate resulting in an unsafe work environment.

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	None	\$2,930,000
	Project Management	None	\$285,000
	Project Contingency	None	\$285,000
	Total Project Cost	None	\$3,500,000

Basis for Cost Estimates: In-house estimate to be used as a placeholder. A more accurate cost estimate for this project will be developed when the evaluation and design phase is complete.

Project Estimated Completion Date: 2020 Design & Permit (months) 1 Construction (months) 24

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	\$3,500,000	Construction

Source of Funding: Water Pollution Control Enterprise Fund Reserves

Operating Budget Impact now or in future: Unknown until completion of evaluation. There is potential for savings on sludge disposal costs.



Water Pollution Control Septage Building

2018 CIP – Deferred Water Pollution Enterprise Fund Projects

Project Working Title: Pump Station Rehabilitation Design & Construction

Project Location: 617 Bearse's Way, Hyannis, MA 02601

Project Description: The Water Pollution Control Division maintains twenty-seven pump stations in the Town of Barnstable. The purpose of this project is to design and construct improvements to twenty-two pump stations as deemed necessary by the evaluation phase. In addition to addressing any issues with the structural, electrical, and mechanical components of these stations, these improvements will address the emergency backup power options for each pump station, the vulnerability of the Town's shoreline pump stations, and the remaining available capacity for each pump station. This request serves as a placeholder until the evaluation phase is completed.

Project Justification: Pump stations are a critical component of the wastewater collection system. Pump station failure could lead to the overflow of sewage into homes, businesses, catch basins, and waterways. The twenty-two pump stations being rehabilitated were built between 1968 and 1993. The remaining five stations are newly constructed, in excellent working order, and are not in need of rehabilitation. Several shoreline pump stations remain unprotected at 100-year flood elevations and are vulnerable during major storm events. Several other pump stations are in need of emergency backup power upgrades.

Impact of Denial/Postponement: Denial of this project would put the Town's pump stations at risk of failure. Failure of a pump station such as the Old Colony Pump station could lead to up to 600,000 gallons per day of sewage overflow into Hyannis Harbor. Failure of other pump stations would lead to sewage backing up into resident's houses or area businesses, putting public health at risk. By proactively rehabilitating these pump stations, the risk of sewage overflow is greatly reduced.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$400,000
	Construction or Acquisition	None	\$3,320,000
	Project Management	None	\$340,000
	Project Contingency	None	\$340,000
	Total Project Cost	None	\$4,400,000

Basis for Cost Estimates: In-house estimate, used as a placeholder pending the results of the evaluation phase.

Project Estimated Completion Date: 2023 Design & Permit (months) 12 Construction (months) 24

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	None	
2020	\$400,000	Design
2021	\$4,000,000	Construction

Source of Funding: Water Pollution Control Enterprise Fund Reserves

Operating Budget Impact now or in future: Unknown at this time, pending the results of the evaluation phase. A reduction in maintenance costs can be assumed for any pump station undergoing rehabilitation.

2018 CIP – Deferred Water Pollution Enterprise Fund Projects

Project Working Title: Sewer Rehabilitation Program

Project Location: 617 Bearse's Way, Hyannis, MA 02601

Project Description: The purpose of this request is to fund a yearly sewer rehabilitation program that will construct improvements to the Town's aging sewer infrastructure.

Project Justification: The Town's sewer pipe network dates back to 1935 clay pipes that cover the downtown area of Hyannis. The system has been expanding ever since. Currently the system is comprised of 47 miles of gravity sewer, 25 miles of force main, 1.5 miles of vacuum sewer, 1.2 miles of low pressure sewer, and 1,258 manholes. In the past, a patchwork style approach to pipe rehabilitation has been utilized. Moving forward the Water Pollution Control Division (WPCD) seeks to systematically and proactively rehabilitate sewer pipe infrastructure that is exhibiting any signs of potential of failure.

Impact of Denial/Postponement: If denied, the WPCD will continue to utilize a patchwork style of rehabilitation, fixing pipes as they break. This would undoubtedly cost more money than a proactive approach, as the ability to utilize cheaper innovative technologies such as pipe bursting or relining would be lost.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	\$75,000	None
	Construction or Acquisition	\$775,000	None
	Project Management	\$75,000	None
	Project Contingency	\$75,000	None
	Total Project Cost	\$1,000,000	None

Basis for Cost Estimates: Placement holder

Project Estimated Completion Date: 2023 Design & Permit (months) 0 Construction (months) 12

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	None	
2020	None	
2021	None	
2022	\$1,000,000	Construction

Source of Funding: Water Pollution Control Enterprise Fund Reserves

Operating Budget Impact now or in future: A small amount of savings can be expected as the need for root control and closed-circuit TV (CCTV) inspections will become less necessary.

Project Working Title: MSB Generator Design and Construction

Project Location: 617 Bearse's Way, Hyannis, MA 02601

Project Description: This project is for construction of a second emergency backup generator at the Water Pollution Control Division's (WPCD) "MSB" switchgear.

Project Justification: A 2014 backup power evaluation recommended replacing the generator at switchgear "MSA" with a 750kw diesel powered generator, and constructing a 450kw diesel powered generator at "MSB" when future loads dictate. It is anticipated that the WPCD will be taking on additional flows as the Town continues to expand its sewer network. It is also likely that the plant will undergo another major upgrade in the near future. In order to provide enough backup power to energize the treatment plant in the event of a power outage, an additional generator will be necessary. This generator will also provide redundancy in the event that the MSA generator fails.

Impact of Denial/Postponement: Denial of this project would result in a lack of backup power for the wastewater treatment plant, and would not be viewed favorably by the Massachusetts Department of Environmental Protection (DEP). In the event of a failure of the MSA generator, portable backup generators can be used to power up small pieces of equipment such as the effluent pumps. This would allow the WPCD to continue to move water through the plant, however it would remain untreated and this would result in effluent violations and possibly a notice of non-compliance from the DEP.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$35,000
	Construction or Acquisition	None	\$365,000
	Project Management	None	\$35,000
	Project Contingency	None	\$35,000
	Total Project Cost	None	\$470,000

Basis for Cost Estimates: Placement holder

Project Estimated Completion Date: 2023 Design & Permit (months) 0 Construction (months) 12

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	None	
2020	None	
2021	None	
2022	\$470,000	Design & Construction

Source of Funding: Water Pollution Control Enterprise Fund Reserves

Operating Budget Impact now or in future: Normal levels of preventative maintenance would continue with no impact on operating budget or staffing.

2018 CIP – Deferred Water Pollution Enterprise Fund Projects

General Fund Projects

Administrative Services General Fund Projects

PROJECT: ADM-IT-18-2

DEPARTMENT PRIORITY: 2 of 2

Project Working Title: Unified Communications – VOIP (Voice over Internet Protocol)

Project Location: All Town locations connected by BFON (Barnstable Fiber Optic Network)

Project Description: Replace existing phone system(s) with Voice over Internet Protocol (VOIP) utilizing the Barnstable Fiber Optic Network (BFON)

Project Justification: The PBX phone system located in Town Hall (508-862-XXXX exchange) will be 17 years old as of July 2017. The 508-862-XXXX exchange has experienced failures more and more as it ages. The Town has been told by the phone vendor that parts were hard to find for systems of this age. With the system's age and sketchy parts availability, it is overdue to be replaced with a newer system. After BFON was completed and all Town and School buildings were connected by high-speed fiber, Information Technology (I.T.) had planned that the next obvious step would be a unified communication system for all Town and School locations. With a proven solid data network backbone in place and aging telephony system(s) it makes sense to combine all locations into one unified communications platform. This will eliminate the islands of smaller CENTREX phone systems that exist today, (508-790-XXXX, Airport, Golf(s), Solid Waste, Police Department etc.) along with the locations that utilize POTS lines (Plain Old Telephone Systems).

Impact of Denial/Postponement: The town would have to continue to use the various older systems and hope that parts can be found should hardware fail. There is no guarantee that replacement parts can be found in a timely fashion so that does add an element of risk to Town operations.

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	\$601,669	None
	Total Project Cost	\$601,669	None

Basis for Cost Estimates: State Contract vendor pricing.

Project Estimated Completion Date: 2018	Design & Permit (months)	2 Construction (months) 10
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Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components	
2018	\$601,669	Construction or Acquisition	

Source of Funding: General Fund & Enterprise Fund Reserves

Operating Budget Impact now or in future: The first three years of maintenance are included in the amount being requested. In FY21, maintenance will be approximately \$40,000 a year. If the Systems/Network Engineer's position is funded that will be an additional yearly cost beginning with FY18. The position has yet to be graded. If this VOIP project is funded, beginning in FY18 there will be an additional \$36,000 required to fund the actual telephone lines to the outside world. Structures and Grounds have funding in their budget for telephone lines now and possibly a shift of those funds could cover a portion of the new line costs.

2018 CIP - Deferred Administrative Services General Fund Projects

Community Services General Fund Projects

PROJECT: CSD-18-2

DEPARTMENT PRIORITY: 2 of 18

Project Working Title: Craigville Bathhouse Site Work

Project Location: 997 Craigville Beach Road, Centerville, MA 02632

Project Description: This project would fund improvements at the Craigville Bathhouse consisting of pavement, striping, gates and guardrails. Funding for this project continues the multi-year improvement project at this location improving the interior and exterior of the building and making the facility operational. These funds would provide for design and renovation/construction of the project.

Project Justification: This building has been patched, repaired and painted, but heavier renovations are now necessary. The site is in need of improvement with regard to striping, layout, walks, rails, and gates. It is not solely cosmetic; many of the needs are safety related. The intention is to bring the building up to standard for safe use by all the citizenry.

Impact of Denial/Postponement: The public heavily uses this facility. The site is in poor condition and will continue to decline without the much-needed repairs. The building will lose popularity with its users without improvements to this aging facility.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	\$15,000	None
	Construction or Acquisition	\$200,000	None
	Project Management	\$10,000	None
	Project Contingency	\$20,000	None
	All Other Costs	\$1,800	None
	Total Project Cost	\$246,800	None

Basis for Cost Estimates: In-house Architect

Project Estimated Completion Date: 2018 Design & Permit (months) 3 Construction (months) 6

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components	
2018	\$246,800	Design & Construction	

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: To be determined



Craigville Bathhouse and Parking Lot

Project Working Title: Bathhouse Septic Upgrades Program

Project Location: Loops, Dowses, Lovell's, and Wequaquet Beaches

Project Description: This project will fund the design and construction of four (4) Title V septic systems

Project Justification: The existing systems are in violation of Board Of Health Septic Regulations

Impact of Denial/Postponement: Use of the facilities will continue to violate current septic regulations. Antiquated systems risk compromising beach water quality

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	\$27,500	None
	Construction or Acquisition	\$145,200	None
	Project Management	\$7,260	None
	Project Contingency	\$7,260	None
	Total Project Cost	\$187,220	None

Basis for Cost Estimates: In-house estimate

Project Estimated Completion Date: 2019 Design & Permit 4 Construction (months) (months)

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$187,220	Design & Construction

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: With new construction technology, we will realize continued savings in energy and maintenance costs.



Bathhouse Septic Upgrades

2018 CIP - Deferred Community Services General Fund Projects

8

Project Working Title: Kennedy Memorial Renovation Construction

Project Location: 480 Ocean Street Hyannis, MA 02601

Project Description: Historic restoration and preservation of the John F. Kennedy Memorial Park. Work consists of the restoration of the concrete patio, granite benches, fountain, and landscape enhancements as needed.

Project Justification: Town of Barnstable owns and operates the John F. Kennedy Memorial Park located at 480 Ocean Street, Hyannis. The park was constructed in 1965 and dedicated on July 8, 1966, to memorialize our 35th President and his association with Cape Cod. The park has been a major visitor attraction since its inception, and continues to be heavily visited.

Impact of Denial/Postponement: This project has been identified as a priority by the JFK Memorial Trust Fund Committee and Town Manager. The pool fountain and associated mechanical equipment is in a state of failure. Delay will result in rapid deterioration and increased costs of repairs.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	\$95 <i>,</i> 823	None
	Construction or Acquisition	\$798,525	None
	Project Management	\$39,926	None
	Project Contingency	\$39,926	None
	Total Project Cost	\$974,200	None

Basis for Cost Estimates: Consulting Architect Estimate

Project Estimated Completion Date: 2018 Design & Permit (months) 0 Construction (months) 6

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components	
2018	\$974,200	Design & Construction	

Source of Funding: Capital Trust Fund Reserves



John F. Kennedy Memorial- Veteran's Park Beach

Project Working Title: West Bay Channel Dredging Design and Permitting

Project Location: West Bay, Cotuit, MA 02635

Project Description: This project involves the design and permitting for the continued maintenance dredging of the West Bay entrance channel.

Project Justification: This channel provides important navigational access for a significant number of recreational and commercial boats. The failure to maintain these channels can result in very dangerous conditions, which can threaten the safety of our residents and risk serious damage to boats.

Impact of Denial/Postponement: The channels will continue to shoal and eventually completely close off access for recreational and commercial boating into the Three Bays area.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$80,000
	Project Management	None	\$12,000
	Project Contingency	None	\$9,200
	Total Project Cost	None	\$101,200

Basis for Cost Estimates: Environmental engineering and in-house estimate

Project Estimated Completion Date: 2019 Design & Permit (months) 12 Construction (months) 0

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	\$101,200	Design and Permitting

Source of Funding: Capital Trust Fund Reserves

Project Working Title: Blish Point Design for Long Term Solutions

Project Location: Blish Point and Millway Beach, Barnstable

Project Description: This project involves a three-phase approach to the sand loss issues at Blish Point. Phase I (completed) was the design and construction of an immediate, near term, "soft" solution to protect the point. Phase II involves designing and permitting a more permanent solution for the sand management at Blish Point. Phase III involves the construction of the more permanent solution to deal with the sand transportation issue.

Project Justification: On two occasions, a side slope soft solution for erosion control to protect the sedimentation basin has been installed, and each time it has failed. The erosion along the dune edge has continued to provide the source of sand and sediment that is filling in Barnstable Inner Harbor. This has resulted in the need for regular removal of deposited sand at the State boat ramp, and sand continues to fill in the recently dredged areas of the harbor. The Phase I work is complete. A more permanent solution to the erosion issue is needed.

Impact of Denial/Postponement: The dune edge will continue to erode and eventually completely breach the sedimentation basin, releasing undesirable sediment onto the beach and into the Inner Harbor.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$165,000
	Construction or Acquisition	None	\$1,600,000
	Project Management	None	\$15,750
	Project Contingency	None	\$15,750
	Total Project Cost	None	\$1,796,500

Basis for Cost Estimates:

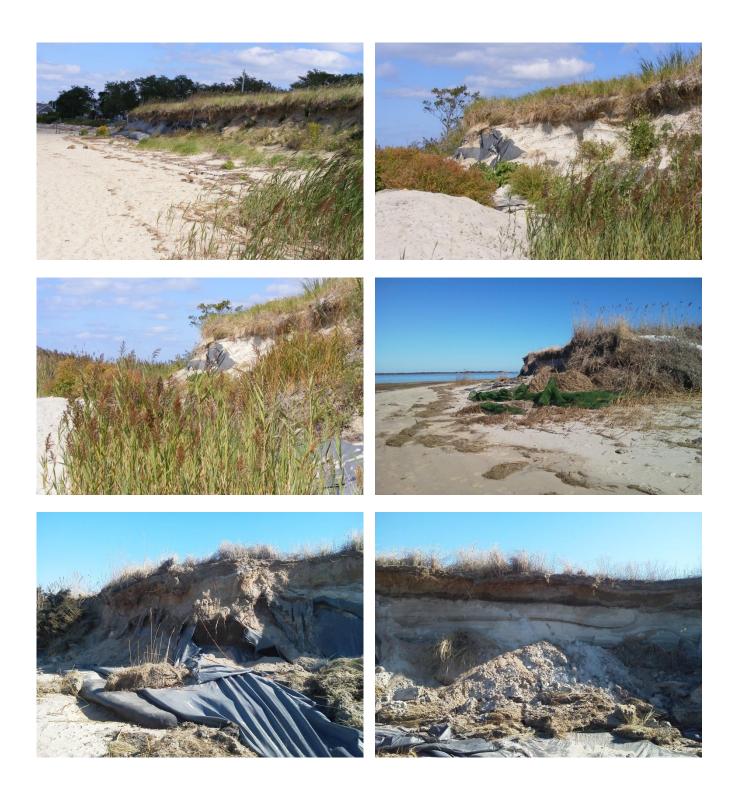
Project Estimated Completion Date: Design & Permit (months) Construction (months)

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components	
2018	None		
2019	\$196,500	Phase II Design and Permitting of permanent solution	
2020	\$1,600,000	Phase III Construction of permanent solution	

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: To be determined



Blish Point and Millway Beach Coastal Erosion

DEPARTMENT PRIORITY: 8 of 18

PROJECT: CSD-18-8

Project Working Title: MEA Interior Project Phase III

Project Location: 1189 Phinney's Lane, Centerville, MA 02632

Project Description: The project consists of interior improvements of the existing Marine and Environmental Affairs building.

Project Justification: Phase I & II Renovations of the Marine and Environmental Affairs building was recently completed, which converted temporary work areas into needed permanent open office areas. Phase III of the planned renovation work will include reconfiguration of the main entrance area to comply with accessibility requirements, restrooms will be made ADA compliant. Interior office areas will be refinished with new paint, flooring, and lighting. Much needed storage areas will be completed in the garage area.

Impact of Denial/Postponement: The Restrooms are non-compliant in ADA terms and Existing offices are below acceptable standards and need upgrading. This gives a poor impression of the Town to the visiting public using these facilities.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	\$9,526	None
	Construction or Acquisition	\$144,332	None
	Project Management	\$7,938	None
	Project Contingency	\$30,310	None
	Total Project Cost	\$192,106	None

Basis for Cost Estimates: In-house estimate

Project Estimated Completion Date: 2018 Design & Permit (months) 6 Construction (months) 6

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components	
2018	\$192,106	Design & Construction	

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: New facility will protect equipment and add to its longevity by putting it under cover. Increased utilities cost \$1,000 per year.

Project Working Title: Beach Parking Lot Rehabilitation - Covell's Beach

Project Location: Craigville Beach Road, Centerville, MA 02632

Project Description: Reclaim parking lot and construct storm water controls. Provide new line striping

Project Justification: The existing pavement has deteriorated such that rehabilitation is necessary. Large areas of puddles exist after rains inconveniencing paying customers to the beach.

Impact of Denial/Postponement: The parking lot will deteriorate further resulting in the need for more complete reconstruction. The facility will not properly serve the thousands of annual visitors to the beach

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	\$360,000	None
	Project Contingency	\$72,000	None
	All Other Costs	\$500	None
	Total Project Cost	\$432,500	None

Basis for Cost Estimates: DPW Engineering Estimate

Project Estimated Completion Date: 2018 Design & Permit (months) 6 Construction (months) 4

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$432,500	Construction

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: Provision of a new ramp will alleviate the need for continued special repairs.

Project Working Title: West Bay Breakwater – Permitting and Construction

Project Location: West Bay Osterville

Project Description: A detailed report prepared by Ocean & Coastal Consultants published in March 2014 recommended repairs to reset the armor stones currently displaced and recommended a second layer of armor stones designed to accommodate the 100 year storm be integrated into the existing stone to increase the thickness and "soften" the side slopes of the breakwater.

Project Justification: Numerous storms, heavy seas and constant wave action have damaged the stone breakwater that protects both sides of the channel entering West Bay from Nantucket Sound. The integrity of the structure is now compromised; the breakwaters have lost stones and have settled. The breakwaters provide for safe navigation in the area and prevent shoaling of the entrance channel.

Impact of Denial/Postponement: If not remedied, the structure will continue to deteriorate and the shoaling in the inlet will worsen as a result and the channel become non-navigable. Water quality in the bay will be compromised.

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	None	\$5,047,250
	Total Project Cost	None	\$5,047,250

Basis for Cost Estimates: Consultant and DPW Engineering

Project Estimated Completion Date: 2019 Design & Permit (months) 6 Construction (months) 4

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	\$5,047,250	Project Design, Construction & Project Management

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: Provision of a new ramp will alleviate the need for continues special repairs .



West Bay Breakwater

Project Working Title: Mill Pond & Long Pond Fish Ways - Construction

Project Location: Mill Pond Adjacent to Route 149 Marstons Mills & Long Pond off Holly Lane, Centerville

Project Description: Rehabilitation work at the Mill Pond site including repair of the concrete flume, dam and associated access walks and fencing. Construction at the Long Pond site of a permanent control structure and fish way, together with stream bank stabilization. Final design and permitting was expected to be completed by April 30, 2016.

Project Justification: Fish ways and associated works provide a basis for the continuation of the historic and natural process of fish passage to spawn in our ponds. There are extensive cultural and economic benefits associated with this project. The Mill Pond site will be coordinated with the upcoming Marstons Mills Village Center Improvement project

Impact of Denial/Postponement: Delay of appropriating construction funding for these projects will result in continuation of the inability of fish to access headwaters and therefore upset the balance of nature in the ponds. This in turn will negatively affect the cultural and economic benefits to be gained.

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	None	\$290,000
	Project Management	None	\$14,500
	Project Contingency	None	\$72,500
	All Other Costs	None	\$500
	Total Project Cost	None	\$377,500

Basis for Cost Estimates: DPW Engineering Analysis.

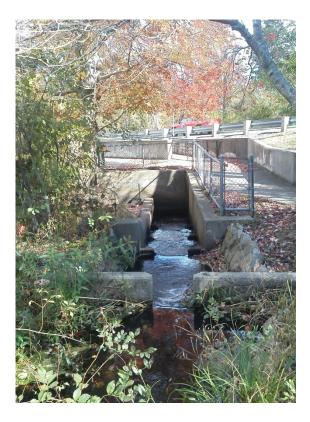
Project Estimated Completion Date: 2019 Design & Permit (months) 6 Construction (months) 9

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components	
2018	None		
2019	\$377,500	Construction and construction management	

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: New Construction will require minimal maintenance





Mill Pond & Long Pond Fish Ways

Project Working Title: Hyannis Breakwater Study Preliminary Design and future construction.

Project Location: Hyannis Harbor

Project Description: Analysis and preliminary design of the Hyannis Harbor Breakwater, final design and construction costs will be established after preliminary work.

Project Justification: Support stones have been displaced along the breakwater resulting in gaps in the structure therefore reducing its effectiveness of protecting the harbor. The poor condition of the breakwater is a safety hazard for navigation, and the public who walk upon it. Harbormaster staff, Fire Departmentt., and other Public Officials have been called to rescue people trapped on the breakwater.

Impact of Denial/Postponement: Postponing study and analysis of the breakwater will allow more deterioration of the breakwater structure. Future storms will reduce the function of the breakwater allowing potential shoreline damage. The safety of the public walking on the breakwater will not be addressed.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	\$157,500	None
	Project Contingency	\$7,875	None
	All Other Costs	\$1,625	None
	Total Project Cost	\$167,000	None

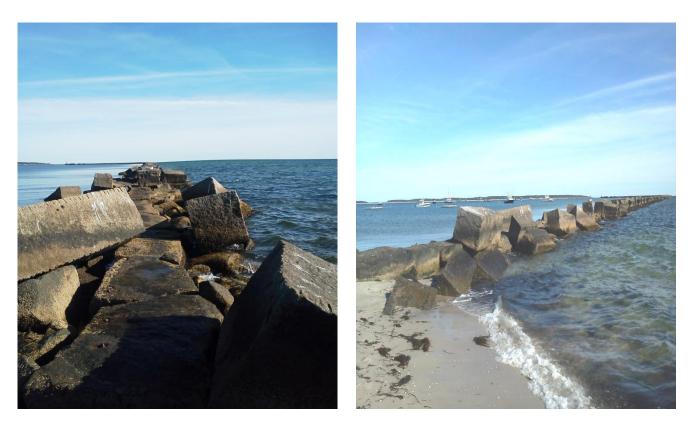
Basis for Cost Estimates: DPW Engineering - Comparison with West Bay breakwater design costs from RFP.

Project Estimated Completion Date: 2019 Design & Permit (months) 18 Construction (months) 0

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components	
2018	\$167,000	Study and Preliminary Design	
2019	TBD	Final design and Permitting	
2020	TBD	Construction and Construction Management	

Source of Funding: Capital Trust Fund Reserves



Hyannis Breakwater

Project Working Title: Centerville Recreation Building Site Design & Construction

Project Location: 524 Main Street, Centerville, MA 02632

Project Description: Design of parking expansion, drainage, lighting, new playground equipment, and ballfield improvements.

Project Justification: The existing playground is unsafe by current standards. Parking is inadequate as the building and grounds are heavily used. The existing ball field has deep holes and ruts and is at the end of its useful life. Currently there is no handicapped access to the playground.

Impact of Denial/Postponement: N/A

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	\$132,110	None
	Construction or Acquisition	None	\$737,051
	Project Management	\$44,037	None
	Project Contingency	None	\$159,900
	Total Project Cost	\$176,147	\$895,951

Basis for Cost Estimates: N/A

Project Estimated Completion Date: 2019 Design & Permit (months) 0 Construction (months) 0

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$176,147	Design
2019	\$895,951	Construction

Source of Funding: Capital Trust Fund Reserves



Centerville Recreation Playground and Ball Field

DEPARTMENT PRIORITY: 15 of 18

PROJECT: CSD-18-15

Project Working Title: Scudder's Lane Boat Ramp Design & Construction

Project Location: Scudder's Lane, Barnstable, MA 02630

Project Description: Remove existing asphalt boat ramp and replace with concrete ramp, add additional storm water structures in the parking area

Project Justification: The boat ramp is very old and the asphalt is collapsing creating both a safety hazard and restriction on use for the recreational and commercial (shellfish) needs of access to the water.

Impact of Denial/Postponement: Denial of moving forward with this project will result in the need for costly temporary repairs and as the ramp deteriorates, further could result in closure of the access to important shell fishing and recreational boating.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	\$30,600	None
	Construction or Acquisition	\$170,000	None
	Project Management	\$10,200	None
	Project Contingency	\$44,200	None
	All Other Costs	\$500	None
	Total Project Cost	\$255,500	None

Basis for Cost Estimates: DPW Engineering Estimate

Project Estimated Completion Date: 2018 Design & Permit (months) 6 Construction (months) 4

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$255,500	Design & Construction

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: Provision of a new ramp will alleviate the need for continued special repairs.



Scudder's Lane Boat Ramp

Project Working Title: Millway Beach ADA Access

Project Location: Millway Beach, Barnstable, MA 02630

Project Description: This project will fund the design and construction of a new ADA ramp to the beach.

Project Justification: Currently there is inadequate beach access for disabled persons at this location. The Architectural Access Board Regulations require the provision of code-compliant access to amenities provided by the Town. Temporary solutions have been attempted at this site, which have not satisfactorily met access requirements. This project would provide a permanent solution.

Impact of Denial/Postponement: Use of the facility will continue to violate current access requirements by not providing compliant access. The town will continue to be susceptible to legal action including civil rights violations. The Town is required to provide access to amenities that it provides to the general public. Certain members of the public will continue to be in danger of injury from inadequate access.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$9,500
	Construction or Acquisition	None	\$185,600
	Project Management	None	\$9,200
	Project Contingency	None	\$16,700
	Total Project Cost	None	\$221,000

Basis for Cost Estimates: In-house estimate

Project Estimated Completion Date: 2019 Design & Permit (months) 4 Construction (months) 4

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	\$221,000	Design & Construction

Source of Funding: Capital Trust Fund Reserves



Americans with Disability Act (ADA) Access Ramp to Beach

PROJECT: CSD-18-17

Project Working Title: MEA Bldg Site Work Improvements Phase IV

Project Location: 1189 Phinney's Lane, Centerville, MA 02632

Project Description: The existing Marine and Environmental Affairs building was constructed over 20 years ago. The site is in need of improvements and upgrades to extend its useful life. There are currently 20 employees, not including seasonal staff, working out of this facility.

Project Justification: The Marine and Environmental Affairs facility has seen no major site work since its construction in 1979. An ongoing program of renovations is necessary in order to protect the Town's building assets and assure reliability in the future for this unit's operation. Whilst the building is being upgraded, nothing has been done for its overused site. Improvements are needed.

Impact of Denial/Postponement: Life safety concerns and the possible loss of use of the facility if upgrades not incorporated and the facility continues to deteriorate.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	\$11,733	None
	Construction or Acquisition	\$177,769	None
	Project Management	\$9,777	None
	Project Contingency	\$27,554	None
	Total Project Cost	\$226,833	None

Basis for Cost Estimates: In-House

Project Estimated Completion Date: 2018 Design & Permit (months) 4 Construction (months) 8

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$226,833	Design & Construction

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: To be determined

PROJECT: CSD-18-18

Project Working Title: MEA Storage Building Phase V

Project Location: 1189 Phinney's Lane, Centerville, MA 02632

Project Description: The project consists of a 2,500 square foot storage addition to the existing Marine and Environmental Affairs (MEA) building and associated site work upgrades.

Project Justification: The MEA building currently is insufficient in size to accommodate equipment. Because of various reorganizations and repositioning of staffing over the years, MEA has had to create office space in the garage area which further limits the ability to have a sufficient working area and reduced space for the storage of vehicles and boats. This project will provide the needed space that will allow for the garaging of the division's vehicles and boats, protecting them from the elements; and allow for covered and protected maintenance on them. The office building should then be used for the growing office functions, therein, separating vehicle and boat storage areas from the office functions.

Impact of Denial/Postponement: The Town's boats and other equipment being stored outside will continue to deteriorate at an undesirable rate and, as such, their useful life shortened.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$40,057
	Construction or Acquisition	None	\$606,927
	Project Management	None	\$33,381
	Project Contingency	None	\$66,762
	Total Project Cost	None	\$774,439

Basis for Cost Estimates: OPM cost estimate

Project Estimated Completion Date: 2022	Design & Permit (months)	10	Construction (months)	12
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Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	None	
2020	\$106,819	Design
2021	\$667,620	Construction

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: New facility will protect equipment and add to its longevity by putting it under cover. Increased utilities costs \$1,000 per year.

Public Works General Fund Projects

PROJECT: PW-18-4

DEPARTMENT PRIORITY: 4 of 45

Project Working Title: Sidewalks on Pitchers Way (Bearse's Way to Route 28) Design & Construction

Project Location: Adjacent to Pitchers Way from Bearse's Way to Route 28, Hyannis, MA 02601

Project Description: Provide pedestrian access for residents along Pitchers Way and its abutting streets to the commercial area north by Route 132 and south by the Route 28 bike path

Project Justification: The section of Pitcher's Way from Route 28 to Route 132 is heavily populated and an attractive pedestrian way to various attractions on Route 132. An unfortunate pedestrian fatality on this section of Pitcher's Way highlights the need for a sidewalk. The project will be a great benefit to walkers and joggers in the area.

Impact of Denial/Postponement: Failure to implement this project construction will perpetuate unsafe conditions for pedestrians traveling along the road.

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	\$450,000	None
	Project Management	\$50,000	None
	Project Contingency	\$95,000	None
	Total Project Cost	\$595,000	None

Basis for Cost Estimates: DPW Engineering Division.

Project Estimated Completion Date: 2019 Design & Permit (months) 6 Construction (months) 6

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$595,000	Project Construction & Project Management

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: Normal maintenance requirements will be expanded to this section of sidewalk.



Pitchers Way

Project Working Title: Private Road Repair

Project Location: Asa Meigs Road, School Street and Old Mill Road in Marstons Mills, MA 02648

Project Description: Legislation passed in 2014 (Chapter 339 of the Acts of 2014 - signed by the Governor on 10/3/2014) allows that "the Town of Barnstable may from time to time, for the purpose of ensuring the safety of the general public, enter and make expenditures for undertaking maintenance and improvements within the layout, or any portion thereof, of one or more private ways within the Town". To do this the Town must make "a declaration of common usage of such private way by the general public by vote of the Town Council". Common usage is defined as "a road or any portion thereof that has been commonly used by the general public for a period of at least 20 consecutive years of travel directly from 1 public road or area to another public road or area." In FY2016, two roads were improved under this legislation Flint Street and Willow Street. For this CIP it is proposed repair Asa Meigs Road, School Street and Old Mill Road in Marstons Mills.

Project Justification: The roads in question are in common usage, in need of repair, and are heavily traveled. All proposed roads will be reclaimed.

Impact of Denial/Postponement: The roads will continue to deteriorate, possibly leading to unsafe and ultimately unpassable conditions.

Project Cost Estimates:	FY 2018		Future FY
	Total Project Cost	\$750,000	\$1,500,000

Basis for Cost Estimates: DPW staff utilizing the pavement management system.

Project Estimated Completion Date: 2018 Design & Permit (months) 6 Construction (months) 6

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$750,000	Design and Construction
2019	\$750,000	Design and Construction
2020	\$750,000	Design and Construction

Source of Funding: Sewer Construction & Private Way Improvement Fund Reserves

Operating Budget Impact now or in future: To be determined





Private Road Pavement Cracks

Project Working Title: Town Hall Complex Improvements - Parking Lot

Project Location: 367 Main Street, Hyannis, MA 02601

Project Description: The project will fund the design and construction of paving, curb, landscape, lighting and drainage work that will resolve a disorganized site with traffic conflicts and multiple curb cuts.

Project Justification: The Town Hall Complex is the center of our town and school offices, art and historical museum activities, and Main Street commerce. The proposed project would improve lighting and pavement conditions, correct deficiencies in the current automobile traffic pattern and provide safe pedestrian access to associated connection points. Current vehicular and pedestrian traffic is dangerous and inconvenient within the area. The proposed alterations are designed to correct these issues. Additional barrier free parking spaces will be created as part of this project.

Impact of Denial/Postponement: We will continue to have problems with pedestrian and vehicular traffic. The public will continue to endure poor lighting conditions and security issues while attending evening meetings.

Project Cost Estimates:	oject Cost Estimates:		Future FY
	Design & Permitting	\$90,000	None
	Construction or Acquisition	None	\$722,000
	Project Management	\$15,000	\$25,000
	Project Contingency	\$20,000	\$80,000
	Total Project Cost	\$125,000	\$827,000

Basis for Cost Estimates: In-house estimate

oject Estimated Completion Date: 2018	Design & Permit (months	s) 4	Construction	(months)	8
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Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$125,000	Design
2019	\$827,000	Construction

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: To be determined



School Administration Building and Town Hall Parking Lots

Project Working Title: Town Hall Security Improvements

Project Location: 367 Main Street Hyannis, MA 02601

Project Description: Phased implementation of the recommendations contained within the Internal Security Evaluation. The FY18 work includes:

• Issue all Town Employees a picture ID card that also acts as a door lock access card, with associated passcode. Also, install door lock readers with which the ID cards will work.

• Rework access to the Town Clerk's office window to allow citizens to interact with the clerk's office employees without physically entering the space.

• Rework/replace the exit doors so all entrances to the building, with the exception of the main entrance, are locked, monitored by a video camera (see FY19 recommendations), and only accessible from the outside by employees with an ID card and pass code.

• Install internal security doors on the main floor as appropriate.

• Modify the elevator so the general public cannot proceed beyond the second floor without an ID card.

• Install security doors to prevent the general public from proceeding beyond the second floor without an ID card.

Project Justification: FY15 Town Council approved a CIP to evaluate the security risks in Town Hall. During initial project meetings between Town leaders, the Barnstable Police Department (BPD), and the Department of Public Works (DPW) it was decided that the actual evaluation could be handled internally, and the monies in that CIP should be used for implementation of identified security measures. The evaluation has been completed, and the FY15 money is being used for the FY17 portion implementation plan. This CIP is to fund the FY18 implementation plan.

Impact of Denial/Postponement: The Town will still face the same risks, but without thoughtful proactive measures in place to mitigate those risks, it is vulnerable to a potentially horrible, preventable, outcome.

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	\$480,000	\$250,000
	Total Project Cost	\$480,000	\$250,000

Basis for Cost Estimates: In-house estimate

Project Estimated Completion Date: 2018 Design & Permit (months) 0 Construction (months) 12

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components	
2018	\$480,000	FY18 Town Hall Security Implementation	
2019	\$250,000	FY19 Town Hall Security Implementation	
2020	TBD	Future Town Hall Security Implementation Requirements	

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: This will not be clear until the study is complete, and recommendations have been selected by the Town for implementation.

Project Working Title: Hyannis Main Street West End Rotary Study Design and Construction

Project Location: At the west end of Main Street, intersection with Scudder Lane, North Street and West Main Street, Hyannis, MA 02601

Project Description: A comprehensive review of vehicle, pedestrian and bicycle needs for this important "gateway" to Hyannis. Of particular concern is the lack of pedestrian access around the rotary and proper property access in the vicinity. All potential improvements will be considered including the possibility of a reconfiguration to include a modern roundabout. Stormwater improvements and review of existing utilities will also be addressed.

Project Justification: The existing physical pavement and drainage conditions at this location are due for improvement. Connecting pedestrian facilities from Main Street to West Main Street and North Street is non-existent. Important receptors including schools, open space and business uses will benefit from pedestrian access.

Impact of Denial/Postponement: Lack of progress on this project will result in perpetuating unsafe conditions for pedestrians and cyclists. Vehicle movement will also be hampered especially during the summer season. Water quality in adjacent pond receiving waters will continue to deteriorate.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	\$230,000	None
	Construction or Acquisition	None	\$1,741,300
	Project Management	None	\$197,500
	Project Contingency	None	\$356,200
	All Other Costs	None	\$105,000
	Total Project Cost	\$230,000	\$2,400,000

Basis for Cost Estimates: DPW Engineering Analysis

Project Estimated Completion Date: 2020 Design & Permit (months) 6 Construction (months) 18

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components	
2018	\$230,000	Study, Design& Permitting	
2019	\$2,400,000	Construction & Construction Management	

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: Required regular maintenance by DPW Highway Division will continue. Cost savings will result in less heavy maintenance for pot hole repair and drainage structure repair for the expected life of the project (20 years).







Hyannis Main Street West End Rotary

Project Working Title: Parking Lots Maintenance

Project Location: Various Town Parking Lots

Project Description: A recurring, annual budget, for refurbishing the Town's municipal parking lots.

Project Justification: The Town has 54 parking lots that the DPW maintains. These range from the large, highly-used, ones such as the Town Hall Parking Lot and Craigville Beach Parking Lot (over 20,000SY); to smaller ones such as the Bay Street Landing Parking Lot (almost 600SY). The DPW addresses small maintenance type items, but does not have the budgets for larger issues such as resurfacing, significant drainage reconstruction, rebuilding, etc. This request is intended to start an annual program, much like the public roads program, that allows the department to address these larger work items in a systematic way.

Impact of Denial/Postponement: Denial of the project will result in unresolved safety concerns (i.e. tripping hazards, unsafe traffic flows due to illegible pavement markings, etc.) for visitors and residents utilizing these deteriorating parking lots. Currently, the parking lots are only addressed to this level of maintenance on a project by project basis, and generally only once the parking lot has significantly deteriorated.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	\$50,000	\$200,000
	Construction or Acquisition	\$450,000	\$1,800,000
	Total Project Cost	\$500,000	\$2,000,000

Basis for Cost Estimates: DPW Estimate. A traditional Mill and Overlay of a parking lot is budgeted at approximately \$20/SY, without significant drainage or lighting work. This budget will allow essentially one large parking lot in a year, or multiple smaller ones.

Project Estimated Completion Date: Annual Design & Permit (months) 0 Construction (months) 0

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$500,000	Annual Parking Lot Program
2019	\$500,000	Annual Parking Lot Program
2020	\$500,000	Annual Parking Lot Program
2021	\$500,000	Annual Parking Lot Program
2022	\$500,000	Annual Parking Lot Program

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: Work will be completed by contractors, and project funded employees; and scheduled during traditionally slower times for the Engineering inspectors.

DEPARTMENT PRIORITY: 12 of 45

Project Working Title: ADA Compliance Pedestrian Crossing & Sidewalks Report, Design, Construction

Project Location: Town-wide with emphasis on Village centers

Project Description: In house preliminary analysis of the condition of handicapped crossings and sidewalks in Town has been completed.

Project Justification: The Americans with Disabilities Act of 1990 (ADA) prohibits discrimination and ensures equal opportunity for persons with disabilities in public accommodation and transportation. Regulations promulgated in 2010 require that accessible walkways and street crossings be provided on all public ways.

Impact of Denial/Postponement: Our street crossings and sidewalks will not meet the requirements of the law; safety will be compromised for not only persons with disabilities but also all pedestrian users.

Project Cost Estimates:		FY 2018	Future FY
	Total Project Cost	\$155,000	\$310,000

Basis for Cost Estimates: DPW Engineering Division analysis

Project Estimated Completion Date: 2021 Design & Permit (months) 6 Construction (months) 30

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components	
2018	\$155,000	Design, Permitting and Construction	
2019	\$155,000	Design, Permitting and Construction	
2020	\$155,000	Design, Permitting and Construction	

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: Routine maintenance of the newly constructed crossings and sidewalks will continue as programmed. Fewer "call outs" would be expected for repairs at these areas.



Various Pedestrian Crossing and Sidewalks

Project Working Title: Mosswood Cemetery Building Improvements

Project Location: Mosswood Cemetery, Putnam Avenue, Cotuit, MA 02635

Project Description: Renovation to the present Mosswood Office for the purpose of providing ADA accessibility and restroom facilities.

Project Justification: Mosswood, our largest cemetery, has one inadequate restroom that is used by employees, visitors, and mourners while they conduct business at the office and attend burial services. The renovation would upgrade the existing toilet so that it will be handicapped accessible and provide public handicap access to the building. In order to renovate, modifications to the front entrance and removal of the central chimney is required. Once the chimney is removed, a direct vent furnace will need to be installed.

Impact of Denial/Postponement: We will continue to not have an accessible public restroom or acceptable access to the building. Customers and residents will continue to be inconvenienced by the existing conditions. There will be continued use of inadequate facilities by our employees.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	\$9,590	None
	Construction or Acquisition	\$120,180	None
	Project Management	\$6,000	None
	Project Contingency	\$11,800	None
	Total Project Cost	\$147,570	None

Basis for Cost Estimates: DPW in-house cost estimate

Project Estimated Completion Date: 2019 Design & Permit (months) 3 Construction (months) 8

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$147,570	Design & Construction

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: To be determined





Mosswood Cemetery Building

Project Working Title: DPW Offices Phase III Construction

Project Location: 382 Falmouth Road, Hyannis, MA 02601

Project Description: Construction of the Administrative and Highway Division managerial offices, employee lockers, showers and toilet rooms within the current garage area of the existing Administration / Highway building. The design and construction of the new truck garage (Phase IV) and the design and construction of a new salt shed (Phase V) are listed in separate CIP requests.

Project Justification: The third phase of this five-phase project will provide much needed accommodations for our growing female staff, and office space for the administrative staff, which has filled every available slot in the building. Construction will also allow for the removal of the remaining old "temporary" staff trailer facility (which is at the end of its useful life), thus increasing much needed parking.

Impact of Denial/Postponement: The DPW feasibility study has shown that greater efficiency will be realized through consolidation of the Administrative and Highway offices at this site. Once Phase III is completed, the remaining staff trailer will then be demolished. Decreased operational and utility costs will be realized by elimination of the last trailer with the renovation.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	\$79,500	None
	Construction or Acquisition	None	\$768,262
	Project Management	\$24,000	\$7,972
	Project Contingency	None	\$72,821
	Total Project Cost	\$103,500	\$849,055

Basis for Cost Estimates: DPW In-house estimate

Project Estimated Completion Date: 2018 Design & Permit (months) 6 Construction (months) 6

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$103,500	Design
2019	None	
2020	\$849,055	Construction

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: Phase III should have a negligible impact on the Operating Budget. Utility costs for the new spaces will be offset by elimination of the utilities on the existing, inefficient, temporary trailers that currently house employees.











DPW Offices

Project Working Title: Huckin's Neck Road Reconstruction

Project Location: Centerville, connecting Phinney's Lane with Route 132

Project Description: Project includes roadway reconstruction including new base, paving and storm water upgrades. Design of this project was previously funded by the DPW roads program.

Project Justification: The "Roadway Asset Management" system identified this section of roadway as needing repair. The road surface was inspected and received a 'very poor' rating. The road also has drainage issues that need to be corrected.

Impact of Denial/Postponement: The roadway surface will continue to deteriorate and cause more frequent "call outs" for repair. Water quality issues created by roadway runoff into adjacent ponds will not be addressed and safety of the traveling public could be jeopardized.

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	None	\$2,850,000
	Project Management	None	\$142,000
	Project Contingency	None	\$569,500
	All Other Costs	None	\$5,000
	Total Project Cost	None	\$3,566,500

Basis for Cost Estimates: Consultant cost estimate with DPW Engineering Division Review

Project Estimated Completion Date: 2019 Design & Permit (months) 0 Construction (months) 18

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	\$3,566,500	Construction and construction management

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: Normal maintenance will need to be continued by the DPW Highway Division. A reduction in "call outs "for emergency repairs will be experienced.



Huckin's Neck Road

Project Working Title: Snows Creek Culvert - Construction

Project Location: Snows Creek crossing at Ocean Street, Hyannis, MA 02601

Project Description: Replacement of an existing small culvert with a larger box culvert. Installation of a sidewalk on the south side of Ocean Street in the culvert vicinity and construction of safety railings.

Project Justification: The existing small culvert under Ocean Street is in disrepair with cracked headwalls and eroded embankments. Installation of a new larger culvert will address the aged infrastructure and provide increased "flushing" into the upstream creek. This will improve water quality. A new sidewalk is also proposed on the east side of Ocean Street as part of the project.

Impact of Denial/Postponement: Failure to construct this project will mean further deterioration of the creek estuary with associated loss of aquatic and land based species. Potential expansion of algae growth and invasive species will harm the value of this resource area and affect the neighboring property values.

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	None	\$950,000
	Project Management	None	\$95,000
	Project Contingency	None	\$285,000
	All Other Costs	None	\$100,000 (Police/Detours)
	Total Project Cost	None	\$1,430,000

Basis for Cost Estimates: Consulting Engineers analysis w/ DPW review

Project Estimated Completion Date: 2018 Design & Permit (months) 0 Construction (months) 7

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	\$1,430,000	Project Construction and project Management

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: This project will have added features such as debris gratings that will require additional DPW routine maintenance.



Snows Creek Culvert

DEPARTMENT PRIORITY: 19 of 45

PROJECT: PW-18-19

Project Working Title: Town Hall Interior Renovations

Project Location: 367 Main Street, Hyannis, MA 02601

Project Description: This project is based on recommendations from the building study performed by the historic architect. Due to the magnitude of the scope of work for renovations and possible reconfigurations, it is proposed that this work be executed under a multi-phased program, which will allow the Town Hall to function while in the renovation process. Phase I work is proposed for FY18 and includes architectural and engineering design, cost estimating, contract documents and renovation work for the lower basement and first floors of the building. The areas affected include Tax Collection, Assessors, Lunchroom, Mail and Copy Center and Corridor. Included will be the relocation of the existing TV Studio, energy efficient room lighting, power distribution, installation of new interior floor, wall and ceiling finishes throughout, renovation of the sprinkler system to suit revised floor plan and upgraded lighting and alarm systems

Project Justification: The Town Hall is the public image of the Town. The building needs continual upgrades and improvements. The public areas in Town Hall are in poor condition and give a negative impression of the Town of Barnstable, with chipped paint, peeling wallpaper and significant water damaged exterior walls. The funding for the additional Bathrooms and upgrade to ADA standards are being sought in a separate CIP. The lighting and electrical systems are inefficient and costly. The fire alarm system does not meet present day code standards. Air quality concerns exist with mold within walls and ceilings due to poor HVAC systems and many years of moisture leaking through the walls from the exterior. The existing steam based system is being replaced under a separate FY16 CIP. Much of the exterior plaster and drywall surfaces are in need of full replacement. Any plan changes will require basic changes to all building systems. Spreading out this project over several years will only increase the total cost of the project and subject the occupants and residents to years of construction and inconvenience.

Impact of Denial/Postponement: Mechanical systems will continue to degrade and require increased maintenance and operating costs. The Fire alarm system will continue to degrade and may result in a system that does not function properly thus compromising life safety. The offices are greatly in need of renovation, will continue to be cramped and ineffective workspaces. The public areas of the building will still be in deplorable condition, leaving a poor impression of Town Government. With the waterproofing of the exterior walls being completed, interior walls need major repairs to correct the damage and mold that has occurred by water penetration over many years.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$80,521
	Construction or Acquisition	None	\$552,570
	Project Management	None	\$36,533
	Project Contingency	None	\$148,376
	Total Project Cost	None	\$818,000

Basis for Cost Estimates:

Project Estimated Completion Date: 2021

Design & Permit (months) 6 **Construction (months)**

12

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	\$562,000	Phase I Basement and First Floor Renovations, Public Corridors, Security Improvements, Interior Repairs, Misc. Renovation.
2020	\$256,000	Phase II Design & Renovation, Second Floor

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: The facility is an existing Town facility that is currently maintained by the DPW. Improvements/upgrades are expected to result in improvement in energy usage with new lighting, insulation and HVAC, and are not expected to adversely impact the Operating Budget.



Town Hall Interior

DEPARTMENT PRIORITY: 20 of 45

PROJECT: PW-18-20

Project Working Title: U.S. Custom House Interior Work

Project Location: 3353 Main Street (Route 6A) Barnstable, MA 02630

Project Description: This project would fund needed interior repairs for finishes, HVAC systems, and lighting.

Project Justification: Erected in 1856 the building has been patched, repaired and painted but heavier renovations are now necessary. Handicap access, handicap accessible toilets, and interior finishes need to be addressed.

Impact of Denial/Postponement: Continued deferred repair of the interior of this facility will contribute to its deterioration, and could ultimately result in a increase in repair costs, or require the replacement of existing building items in the future while limiting the public's use of the building.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$29,148
	Construction or Acquisition	None	\$291,500
	Project Management	None	\$14,574
	Project Contingency	None	\$29,148
	Total Project Cost	None	\$364,370

Basis for Cost Estimates: Architect assisted in-house estimate

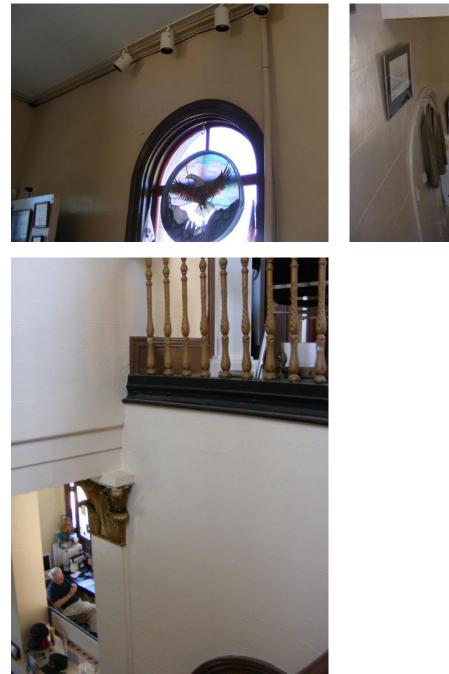
Project Estimated Completion Date: 2020 Design & Permit (months) 6 Construction (months) 10

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	\$364,370	Phase III interior design and restoration

Source of Funding: Possible CPC funds and state grant funds for construction.

Operating Budget Impact now or in future: This work will result in some reduction in maintenance requirements, but should not have a significant impact on the Operating Budgets.



U.S. Custom House Interior

Project Working Title: Bumps River Bridge Construction

Project Location: South Main Street, Centerville, MA 02632

Project Description: Repairs to the bridge.

Project Justification: The bridge analysis performed by our consultant has recommended maintenance and safety repairs.

Impact of Denial/Postponement: Failure to implement the recommended maintenance will result in future deterioration necessitating more expensive repairs. Failure to construct the safety improvements will jeopardize the safety of the traveling public.

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	None	\$250,000
	Project Management	None	\$12,500
	Project Contingency	None	\$62,500
	All Other Costs	None	\$500
	Total Project Cost	None	\$325,500

Basis for Cost Estimates: Consulting Engineer with DPW review

Project Estimated Completion Date: 2019 Design & Permit (months) 6 Construction (months) 6

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	\$325,500	Construction & Construction Management

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: A new bridge will result in less scheduled maintenance and fewer call outs for patching and safety issues.



Bumps River Bridge Support Beams

Project Working Title: Cape Cod Airfield Hangar Repair

Project Location: 1000 Race Lane West Barnstable, MA 02668

Project Description: This project would fund needed structural, exterior and hangar door repairs to the 1920 hangar building. Work will include repair / replacement of the metal roof and siding, Cleaning, repair, and painting of interior corroded structural steel, and repair of the existing partially failed hangar door. These funds would provide for design, renovation and construction.

Project Justification: Originally constructed in 1920, the hangar building has been used extensively for 96 years. Roof leaks have caused structural deterioration of columns and metal roof trusses. Metal roof and siding panels are deteriorated and in some cases missing. A structural assessment of the building was conducted in 2008. The assessment revealed extensive deterioration of structural elements along with additional issues. Temporary repairs and patching will no longer protect the building contents. CPA Funds were sought in 2008 but not granted due to the age of the building not being 100 years old thus not considered historic. An adjacent hangar similar to this building was destroyed during Hurricane Bob in 1991.

Impact of Denial/Postponement: Continued deferred maintenance of this facility will contribute to its inevitable loss.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$28,025
	Construction or Acquisition	None	\$234,000
	Project Management	None	\$14,000
	Project Contingency	None	\$23,350
	All Other Costs	None	\$11,975
	Total Project Cost	None	\$311,350

Basis for Cost Estimates: Architect assisted in-house estimate

Project Estimated Completion Date: 2020 Design & Permit (months) 6 Construction (months) 8

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	\$311,350	Design and Construction / Restoration

Source of Funding: Possible Community Preservation Funds and State Historic Grant

Operating Budget Impact now or in future: These renovations are not expected to have a measurable impact on the Operating Budget.











Cape Cod Airfield Hangar

Project Working Title: Kennedy Legacy Trail Sidewalk Improvements Design & Construction

Project Location: Main Street, Pearl Street, South Street and Ocean Street Hyannis, MA 02601

Project Description: The Kennedy Legacy Trail was created using funds from the Massachusetts Gateway City Park Grant Program. Interactive tools are available for electronic devices to hear the Kennedy history and direct visitors along the physical trail. This project includes enhancement of the sidewalk connections along the Kennedy Legacy Trail including surface improvement, ADA (Americans with disabilities Act) regulated improvements (ramps and crosswalks) sidewalk markings and insignia and improved access to the JFK Memorial at Veteran's Park.

Project Justification: The Kennedy Legacy continues to draw thousands of tourists to Hyannis with the resulting economic benefit. This trail recognizes the great accomplishments of President Kennedy and his family. Safe and properly dimensioned enhanced sidewalks should be provided for this important asset.

Impact of Denial/Postponement: Users of the Kennedy Legacy Trail will be forced to deal with tripping hazards and improper ramps and crossings. Failure to upgrade this facility could result in injuries and lawsuits.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$22,600
	Construction or Acquisition	None	\$170,900
	Project Management	None	\$19,000
	Project Contingency	None	\$26,400
	All Other Costs	None	\$1,100
	Total Project Cost	None	\$240,000

Basis for Cost Estimates: DPW Engineering Division Analysis

Project Estimated Completion Date: 2020 Design & Permit (months) 6 Construction (months) 4

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	\$240,000	Project Design & Permitting, Project Construction & Project Mgt

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: DPW Highway Division will continue regular maintenance. As with all new facilities, fewer "call outs" and repair requests on the sidewalks will result because of this project.



Kennedy Legacy Trail Sidewalk Improvements

Project Working Title: Traffic Signal Upgrades Study Design Construction

Project Location: Town-wide

Project Description: Preventative maintenance, emergency response and professional services to initiate the mitigation of intersection deficiencies, equipment failures and poor intersection operations with the twentyeight (28) existing Town-owned traffic signal systems and four (4) mandated "opticom" systems on state controlled signals. These improvements would increase the level of service for the signaled intersections and adhere to mandatory Federal Manual on Uniform Traffic Control Devices (MUTCD) requirements for pedestrians.

Project Justification: In March 2012, a traffic engineering inventory, analysis, and operations plan was developed for 24 existing Town-owned traffic signal systems, including documentation of the type and condition of control mechanisms, performance of timing functions and compatibility of intersection hardware. The study compared signal timing functionality with identification of current and future traffic flow and/ or pedestrian crossing needs.

Travel times can be significantly increased by delays at signalized intersections, fuel is wasted and air quality is compromised by idling traffic in downtown locations. A Town-wide traffic signal inventory and analysis study has identified maintenance, timing adjustment, changed user needs, and set up a systematic review program for equipment adjustment, upgrade, and replacement. This will ultimately reduce maintenance costs and provide a higher level of service at our intersections.

Impact of Denial/Postponement: Lack of action on this issue will create more costly repairs in the future. It will also promote inefficient use of funds and result in continued frustrations as expressed by local and visiting automobile and pedestrian traffic. Failure to review and maintain our traffic signals could also cause accidents and open the Town to legal responsibility in such unfortunate cases. Seventeen of the eighteen existing traffic signals systems with pedestrian crossings do not meet the Federal MUTCD requirements for pedestrian clearance.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$70,000
	Construction or Acquisition	None	\$227,000
	Project Management	None	\$35,000
	Project Contingency	None	\$18,000
	Total Project Cost	None	\$350,000

Basis for Cost Estimates: DPW Engineering Division

Project Estimated Completion Date: 2022

Design & Permit (months) 4 Construction (months)

4

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	\$150,000	Design & Construction
2020	\$100,000	Design & Construction
2021	\$100,000	Design & Construction

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: To be determined



Traffic Signal Lights

Project Working Title: MS4 Municipal Separate Storm Sewer System Program

Project Location: Various

Project Description: An MS4 is a conveyance system that is owned by a state, city, town, village, or other public entity that discharges to waters of the U.S.; that is designed or used to collect or convey storm water (including storm drains, pipes, ditches, etc.); that is not a combined sewer; and that is not part of a Publicly Owned Treatment Works (sewage treatment plant).

To prevent harmful pollutants from being washed or dumped into water bodies from an MS4, the EPA requires that the Town obtain a NPDES permit (Phase II) and develop a storm water management program. For the Town of Barnstable, that program will include the following:

• In July 2016 – EPA Permit was predicted to be Final and will expire in 5 years (July 2021).

• By July 2017 – Need to submit updated storm water management plan, develop the Illicit Discharge Detection and Elimination (IDDE) Program's written plan; Inventory/audit Town facilities; conduct additional mapping of existing outfall as needed and then develop Operations and Maintenance (O&M) manuals for each facility. Public outreach and participation and annual training will also begin at this time.

• By July 2018 – Develop a Storm Water Pollution Prevention Plans (SWPPPs) for appropriate Town facilities; develop Spill Prevention, Control, and Countermeasure (SPCC) plans for above ground fuel storage tanks; develop park maintenance plans and complete any mapping needs. Public outreach and participation will also continue.

• By July 2019 – Complete dry weather screening of the Town's storm water outfalls

• By July 2020 – Complete the nutrient source ID report

Project Justification: This is a program that is mandated by the United States Environmental Protection Agency (EPA). The Town must comply.

Impact of Denial/Postponement: The Town could face fines from the EPA

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$150,000
	Total Project Cost	None	\$150,000

Basis for Cost Estimates: In-house engineering estimate

Project Estimated Completion Date: 2019 Design & Permit (months) 6 Construction (months) 0

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	\$150,000	Plan implementation

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: To be determined

Project Working Title: West Barnstable Railroad Depot Restoration

Project Location: 2469 Meetinghouse Way (Route 149) West Barnstable, MA 02668

Project Description: This project would fund needed exterior roof and fenestration repairs of the West Barnstable Train Station.

Project Justification: Erected in 1910, the Arts & Crafts / Mission Style Architecture building has been patched, repaired and painted, but heavier renovations are now necessary. The clay tile roof is leaking, causing damage to interior historic finishes. Interior finishes and windows need to be restored and or repaired. Exterior deterioration continues to allow moisture penetration into the structure, causing further damage. It is expected that additional repair items will be discovered during the design and construction process. This is a contributing structure to the West Barnstable Historic District as well as the Old Kings Highway Regional Historic District. This building is a leased property with historic significance.

Impact of Denial/Postponement: Continuing to defer maintenance on this facility will contribute to its deterioration, and will result in increased future repair costs and extensive structural damage. At some point the structure could become inhabitable.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$50,000
	Construction or Acquisition	None	\$252,000
	Project Management	None	\$14,000
	Project Contingency	None	\$50,000
	All Other Costs	None	\$15,000
	Total Project Cost	None	\$381,000

Basis for Cost Estimates: Architect assisted DPW in-house estimate

Project Estimated Completion Date: 2021 Design & Permit (months) 6 Construction (months) 8

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	\$89,000	Railroad Depot Design
2020	\$292,000	Railroad Depot Construction / Repair

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: This facility is an existing facility that is currently maintained by the DPW. These improvements are not expected to influence the Operating Budget.



West Barnstable Railroad Depot

Project Working Title: Bearse's Way Bike Path Construction

Project Location: Bearse's Way from Pitcher's Way to Route 28, Hyannis, MA 02601

Project Description: Project includes the construction of a multi-use path with an asphalt surface twelve (12) feet wide located between the road edge and adjacent property boundaries. The majority of the route will maintain a wide green space between the road and the path. The path will join the soon to be constructed path approach to Route 28 that forms part of the Massachusetts Department of Transportation (MASSDOT) Bearse's Way/ Route 28 intersection improvement project presently under construction. This path will allow cyclists to avoid riding on the busy, high-speed section of Bearse's Way roadway.

Project Justification: This path will complete a bike access route to Hyannis joining the existing path running along Route 132 from Shootflying Hill Road to the multi-use path along Bearse's Way south of Route 28. The impending construction of the Route 28 /Bearse's Way intersection project will allow safe crossing of Route 28.

Impact of Denial/Postponement: Failure to complete this project will result in an unsafe section of roadway for bicycle riders expecting to travel toward Hyannis on the existing bike route links.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$30,000
	Construction or Acquisition	None	\$600,000
	Project Management	None	\$60,000
	Project Contingency	None	\$150,000
	All Other Costs	None	\$25,000 (Police)
	Total Project Cost	None	\$865,000

Basis for Cost Estimates: DPW Engineering Division analysis

Project Estimated Completion Date: 2021 Design & Permit (months) 6 Construction (months) 6

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	\$30,000	Completion of project design
2020	None	
2021	\$835,000	Project construction & project management

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: Additional surface maintenance and snow removal costs will result from this project. Addition DPW Highway Division maintenance will be required for pavement upkeep and snow removal.







Bearse's Way

Project Working Title: School Administration Building Mechanical Upgrades

Project Location: 230 South Street, Hyannis, MA 02601

Project Description: The Scope includes

- Mechanical/Headend upgrades at Lower Level;
- Emergency generator, cooling plant, sprinkler and hot water system equipment replacement;

• Renovation and expansion of the existing basement mechanical room and egress paths to accommodate a replacement emergency generator and replacement of the 30 ton cooling plant including the head-end upgrade of the sprinkler service;

• Removal of the old concrete mounting pad;

• Replacement of the existing electric hot water heater with a new gas fired hot water heater and thermostatic mixing valve;

• Relocation of the gas service from the electric room into the mechanical room to resolve a major code violation;

• Installation of new fire rated walls and ceilings throughout the basement level, including rated door improvements along the access ways. This is a public safety issue needing attention;

• Limited first floor interior reorganization of space (HR), new finishes, ADA access rest room improvements and new lighting; and

 Mechanical/electrical service distribution, replacement, and energy conservation improvements throughout including new electrical service, HVAC controls, ventilation, communications, plumbing and related HVAC improvements, and new elevator.

Project Justification: The historic building study reported significant deficiencies in this building. The exterior restoration work is completed utilizing a combination of General Fund and Community Preservation Act (CPA) funds. The additional mechanical work was not accomplished during the exterior restoration project. Outdated mechanical work remains to be completed for efficiency of operation. With this work the building will be fully renovated with some limited work remaining for the second floor school department office upgrades.

Impact of Denial/Postponement: The building condition study indicates the need for significant head-end mechanical and accessibility improvements. If left as is, further deterioration will occur with increased scope of mechanical repairs resulting in additional inflation and restoration costs.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$253,474
	Construction or Acquisition	None	\$1,550,000
	Project Management	None	\$123,000
	Project Contingency	None	\$333,000
	Total Project Cost	None	\$2,259,474

Basis for Cost Estimates: DPW Cost Estimate

Project Estimated Completion Date: 2021

Design & Permit (months) 8 Construction (months)

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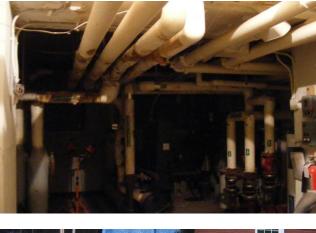
Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	None	
2020	\$253,474	Design of MEP Headend Upgrades.
2021	\$2,006,000	Construction

Source of Funding: Possible CPA Funding

Operating Budget Impact now or in future: Improved energy efficiency for lighting and HVAC









School Administration Building Mechanicals

Project Working Title: Highway Truck Storage Facilities Design and Construction

Project Location: 382 Falmouth Road, Hyannis, MA 02601

Project Description: This project is for the design of a new enclosed and insulated truck garage and shops, with drive-through capability, which will be used to park, store and perform daily maintenance on trucks and equipment. The new building will incorporate the design of taller doors, which allow for access by larger equipment, and would have a lean-to for plow storage. Sanding trucks must be kept protected, in a temperate environment, allowing for quick response to snow and ice emergencies. This design work includes site master planning for the entire campus. Follow on projects include the construction of the new enclosed and insulated truck garage as well as site improvements developed in this phase.

Project Justification: This Project will involve design work required to create a new enclosed and insulated truck garage and shops. The garage is required to provide for the protection, storage and daily maintenance of valuable trucks and equipment. Currently most trucks are left outside and deteriorate at a much faster rate and cannot be accessed quickly during storm events and emergencies.

Impact of Denial/Postponement: The trucks continue to be stored outside and will negatively impact snow and ice operations and result in more rapid deterioration of the fleet.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$400,000
	Construction or Acquisition	None	\$6,135,000
	Project Management	None	\$355,000
	Project Contingency	None	\$200,000
	All Other Costs	None	\$25,000
	Total Project Cost	None	\$7,115,000

Basis for Cost Estimates: DPW Engineering Estimates

Project Estimated Completion Date: 2024 Design & Permit (months) 12 Construction (months) 12

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	None	
2020	None	
2021	None	
2022	\$7,115,000	Design & Construction of new Highway Truck Garage

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: Protection and increased longevity of vehicles will offset the cost of increased utilities.





Public Works Highway Division Equipment Outside Exposure

Project Working Title: Bay Shore Road Boat Ramp-Design and Construction

Project Location: Bay Shore Road, Hyannis, MA 02601

Project Description: The existing boat ramp will be replaced and the adjacent parking area will be reconstructed with permeable paving. Engineering design plans and Environmental Permitting completed prior to bidding and construction.

Project Justification: The Bay Shore Road boat ramp and associated parking area serve important mooring fields within Hyannis Harbor and are heavily used by the boating population in the neighborhood. The existing asphalt ramp is deteriorated and needs replacement. Stormwater facilities that were improved several years ago will undergo a further upgrade to protect water quality.

Impact of Denial/Postponement: If repairs are not made the ramp will continue to deteriorate and will eventually become unsafe and unusable. A ramp that is poor condition poses a safety hazard and could prove to be a liability should an accident occur due to the condition of the ramp.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$30,000
	Construction or Acquisition	None	\$179,450
	Project Management	None	\$9,775
	Project Contingency	None	\$35,275
	All Other Costs	None	\$1,500
	Total Project Cost	None	\$256,000

Basis for Cost Estimates: DPW Engineering Division estimates based upon prior similar project costs

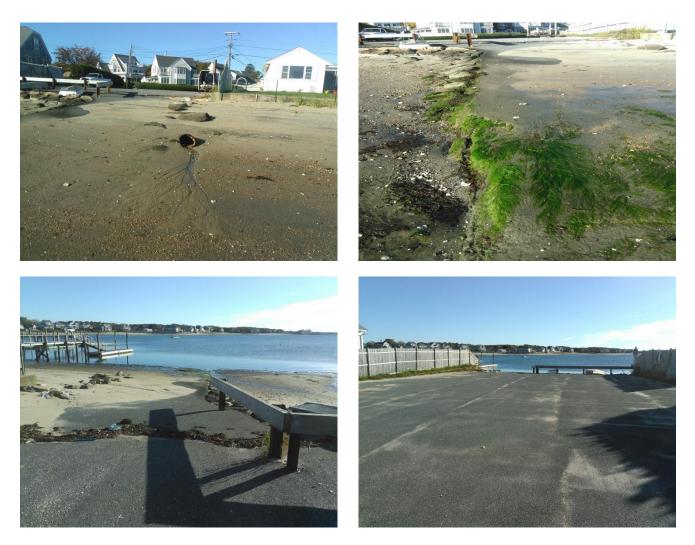
Project Estimated Completion Date: 2022 Design & Permit (months) 12 Construction (months) 6

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	None	
2020	None	
2021	None	
2022	\$256,000	Design & Permitting /Construction & Construction Management

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: Normal operating costs for the facility will continue.



Bay Shore Road Boat Ramp

Project Working Title: Craigville Beach Road Pump Station and Force Main

Project Location: Craigville Beach Bathhouse (997 Craigville Beach Road), Craigville Beach Road, Centerville Avenue, and Old Craigville Road, Centerville, MA 02632

Project Description: Provision of a new wastewater pumping station beside the existing bathhouse, standby generator, construction of a sanitary sewer force main and collector line in anticipation of sewer expansion in the area. Rehabilitation of the roadway after construction to include trench patching.

Project Justification: Craigville Beach is one of the most heavily utilized beaches in Town. In 2014, the FEMA maps rezoned the area of the Craigville Beach bathhouse as part of the flood (velocity) zone. The Town's Board of Health has no record of the existing septic tank at the bathhouse. Its condition and capacity is unknown and may fail in the near future.

The project location lies directly within the Districts of Critical Planning Concern (DCPC), DEP Wetlands, Nitrogen Removal area, and Area of Concern (AOC) as identified in the Comprehensive Wastewater Management Plan (June 2010) and Wastewater Facilities Plan (1994). Identified as an AOC in 1994, this area was found to not be suitable for septic systems. While this project does not address the entire sewer extension to this area, it will provide the backbone infrastructure needed to allow future connections. This project will address approximately 140 properties and their future wastewater needs.

Impact of Denial/Postponement: Denial of the project will result in the Town not being able to provide adequate alternatives for nearby residents with failing septic systems, which will directly affect nearby receiving waters.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$577,500
	Construction or Acquisition	None	\$2,923,000
	Project Contingency	None	\$700,000
	Total Project Cost	None	\$4,200,500

Basis for Cost Estimates: DPW Engineering Estimates

Project Estimated Completion Date: 2022 Design & Permit (months) 12 Construction (months) 12

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	None	
2020	None	
2021	\$577,500	Design
2022	\$3,623,000	Construction

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: To be determined



Craigville Bathhouse: Location of New Waste Water Pump Station On Side of Building

Project Working Title: Burgess Barn Interior

Project Location: 559 Route 149, Marstons Mills, MA 02648

Project Description: This project would fund interior renovations and stabilization of the building interior and access improvements to the Burgess Barn. The work would include floor construction, mechanical, electrical, thermal insulation, interior restoration, and installation of new ADA toilet facilities.

Project Justification: Erected in the late 1700's, the building was is in a state of significant disrepair and in danger of being lost. Additional funding would allow the building to become usable by adding ADA access, toilet and storage facilities.

Impact of Denial/Postponement: Continued deferred renovation of this building will continue its non-use resulting in deterioration of work previously funded by the Community Preservation Committee. Without additional funding, the building would only be suitable for cold storage and underutilized.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$21,792
	Construction or Acquisition	None	\$272,395
	Project Management	None	\$13,620
	Project Contingency	None	\$13,620
	Total Project Cost	None	\$321,427

Basis for Cost Estimates: Architect in-house estimate

Project Estimated Completion Date: 2022 Design & Permit (months) 6 Construction (months) 8

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	None	
2020	None	
2021	None	
2022	\$321,427	Design & Construction / Stabilization

Source of Funding: Possible Community Preservation Funds

Operating Budget Impact now or in future: This project is to stabilize an existing Town building and would require marginal increase in utility costs.











Burgess Barn Interior



Project Working Title: Old Jail Repairs

Project Location: 3365 Main Street, Route 6A, Barnstable, MA 02630

Project Description: This project would fund needed structural, exterior and site improvements to the building. These funds would provide for design and renovation/construction.

Project Justification: Originally constructed in 1690, the building has been moved, patched, repaired and painted, but additional renovations are now necessary. Extensive deterioration of original floor supports has been observed in the basement.

Impact of Denial/Postponement: Continued deferred maintenance of this facility will contribute to its continued deterioration.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$42,000
	Construction or Acquisition	None	\$242,316
	Project Management	None	\$ 12,000
	Project Contingency	None	\$ 24,000
	Total Project Cost	None	\$320,316

Basis for Cost Estimates: Architect assisted in-house estimate

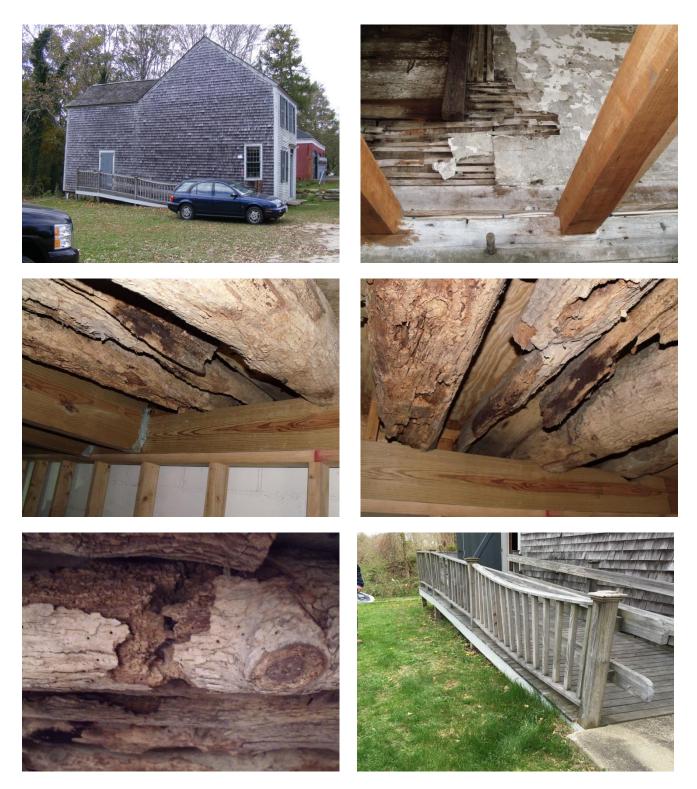
Project Estimated Completion Date: 2022 Design & Permit (months) 6 Construction (months) 8

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	None	
2020	None	
2021	\$320,316	Design / Construction / Restoration / Preservation

Source of Funding: Possible Community Preservation Funds and State Historic Grant

Operating Budget Impact now or in future: These renovations are not expected to have a measurable impact on the Operating Budget.



Old Jail House

DEPARTMENT PRIORITY: 34 of 45

PROJECT: PW-18-34

Project Working Title: U.S. Custom House Carriage House Design and Construction

Project Location: 3353 Main Street (Route 6A) Barnstable, MA 02630

Project Description: This project would fund needed exterior masonry and fenestration repairs of the carriage house building. These funds would provide for design and renovation/construction.

Project Justification: Erected in 1856, the building has been patched, repaired and painted, but heavier renovations are now necessary. Masonry and exterior deterioration continues to allow moisture penetration into the structure, causing furthering deterioration. Masonry arches over the carriage house doors are failing and need to be reconstructed.

Impact of Denial/Postponement: Deferment of restoration to this facility will contribute to its continued deterioration and will result in increased future repair costs and extensive structural damage.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$19,254
	Construction or Acquisition	None	\$160,448
	Project Management	None	\$8,022
	Project Contingency	None	\$22,463
	All Other Costs	None	\$10,000
	Total Project Cost	None	\$220,187

Basis for Cost Estimates: Architect assisted DPW in-house estimate

Project Estimated Completion Date: 2018 Design & Permit (months) 6 Construction (months) 8

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components	
2018	None		
2019	None		
2020	\$46,975	Custom House Carriage House Design	
2021	\$173,212	Custom House Carriage House Restoration	

Source of Funding: Possible Community Preservation Funds and State Historic Grant

Operating Budget Impact now or in future: This facility is an existing facility that is currently maintained by the DPW. These improvements are not expected to affect the Operating Budget.



U.S. Custom House Carriage House

Project Working Title: U.S. Custom House Site Improvements

Project Location: 3353 Main Street, Route 6A, Barnstable, MA 02630

Project Description: This project funds needed site improvements, including restoration of perimeter iron fence, new site walls, parking areas, planting, and lighting.

Project Justification: Erected in 1856, the building is in the process of a phased restoration. Work to the historic landscape is now necessary. Landscape items such as the historic cast iron fence is deteriorating or missing. Parking areas have deteriorated and become undefined. Stone parking areas need new surfacing.

Impact of Denial/Postponement: Continuing to defer maintenance on this facility will contribute to its deterioration and will result in increased future repair costs and damage.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$30,000
	Construction or Acquisition	None	\$169,900
	Project Management	None	\$8,500
	Project Contingency	None	\$8,500
	Total Project Cost	None	\$216,900

Basis for Cost Estimates: Architect assisted in-house estimate

Project Estimated Completion Date: 2021 Design & Permit (months) 6 Construction (months) 8

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	None	
2020	\$30,000	Site Restoration Design
2021	\$186,900	Site Restoration Construction

Source of Funding: Possible Community Preservation Funds and State Historic Grant

Operating Budget Impact now or in future: This facility is an existing facility that is currently maintained by the improvements are not expected to affect the Operating Budget.





U.S. Custom House Site

DEPARTMENT PRIORITY: 36 of 46

Project Working Title: Highway Division/Administrative Services Division Parking Lot Rehabilitation

Project Location: 382 Falmouth Road Hyannis, MA 02601

Project Description: Reclaim/regrade parking lot, provide new asphalt paving and line striping

Project Justification: This parking lot is the hub of activity for employee and visitors parking at the DPW main facility. In addition, working vehicles use the lot extensively. The parking lot has deteriorated with many cracks and irregularities.

Impact of Denial/Postponement: Failure to repair the parking lot will result in further damage to the surface from vehicle and snow removal activities. The parking lot will become difficult to use for critical functions and become a safety hazard for vehicles and pedestrians alike.

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	None	\$220,000
	Project Contingency	None	\$44,000
	Total Project Cost	None	\$264,000

Basis for Cost Estimates: DPW Engineering Estimate

Project Estimated Completion Date: 2021	Design & Permit (months)	6	Construction (months)	6
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Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	None	
2020	None	
2021	\$264,000	Construction

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: Repaving will alleviate the need for continued special repairs



Public Works Highway Division/Administrative Services Division Parking Lot

DEPARTMENT PRIORITY: 37 of 45

Project Working Title: Marstons Mills Airport Fuel Tank Replacement

Project Location: 1000 Race Lane, Marstons Mills, MA 02648

Project Description: This project would fund the removal of the existing 2,000 gallon underground fuel tank at the Marstons Mills Airport, and installation of a new 24 hour per day above ground fuel station. These funds would provide for design, removal and installation.

Project Justification: The existing 2,000 gallon underground fuel tank is aged and it is time for it's removal before it deteriorates any further and leaks fuel into the ground.

Impact of Denial/Postponement: Deferring this item increases the opportunity for the underground tank to fail and leak fuel into the soil.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	\$15,000	None
	Construction or Acquisition	\$ 90,000	None
	Project Management	\$4,500	None
	Project Contingency	\$18,000	None
	All Other Costs	\$5,000	None
	Total Project Cost	\$132,500	None

Basis for Cost Estimates: In-house estimate

Project Estimated Completion Date: 2018 Design & Permit (months) 4 Construction (months) 2

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components	
2018	\$132,500	Design and Construction / Restoration	

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: These renovations are not expected to have a measurable impact on the Operating Budget.

Project Working Title: Armory Building Envelope, Electrical, and Mechanical Improvements

Project Location: South Street, Hyannis, MA 02601

Project Description: This project will fund the preliminary and final design of the Armory Improvements. It is expected those improvements will at a minimum include the following as described in a 2012 Assessment of the Armory by Design Lab Architects:

- Replacement of Windows and Doors, and their associated frames;
- Replacing the steel lintels;
- Repairing cracks in the CMU bearing walls, brick facing, and Glazed Structural Facing Tile;
- Replacing the domestic hot water system (heater, distribution pipes, etc.);
- Replacing the plumbing fixtures in the building and associated piping as appropriate;
- Replacing the interior gas piping;
- Replacing the storm system piping as appropriate;
- Installation of a sprinkler system;

• Replacing the heating/ventilation system and associated piping, ductwork, fin-tube radiators, units, and control system;

- Replacing the exhaust systems in bathrooms;
- Replace the existing 200A electrical service with a 800-1200A service, along with associated panels;
- Replace the electrical distribution equipment and feeders;
- Replace the electrical receptacles and associated branch wiring;
- Replacing the lighting; and
- Hazardous material identification and abatement as necessary.

Project Justification: This project will fund the design of the work that will ultimately stabilize the deterioration of the facility. It is expected it will bring the building to a point that its next tenant (whether the Town or a private entity) can focus on operational issues, building layout, and interior finishes (painting, carpeting, etc.). Without it, the building will continue to deteriorate; and it is likely potential tentants will find the cost of the required work to be more than they can afford.

Impact of Denial/Postponement: The building will continue to deteriorate, and will likely be considered not inhabitable by many potential tenants. At some point, the Town will have to address these issues for the building, or risk it falling into ruin.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$400,000
	Construction or Acquisition	None	TBD
	Project Management	None	TBD
	Project Contingency	None	TBD
	Total Project Cost	None	TBD

Basis for Cost Estimates: DPW estimate

Project Estimated Completion Date: 2022 Design & Permit (months) 18 Construction (months) TBD

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	None	
2020	None	
2021	None	
2022	\$400,000	Preliminary and Final Design

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: To be determined



Armory Building Envelope, Electrical, and Mechanical

Project Working Title: Coastal Resiliency Master Plan Development

Project Location: Various

Project Description: The preparation of a Master Plan to investigate public infrastructure needs and requirements that may result from the anticipated impacts of climate change and sea level rise over the next several decades.

Project Justification: While various agencies throughout all levels of government have attempted to mitigate the impacts of coastal hazards, particularly as a result of climate change and predicted sea level changes, it is difficult for local communities to convert the separate requirements of state and federal agencies into a plan. This is especially true for DPWs that are responsible for the public infrastructure, where several questions arise. How might the existing infrastructure be affected by current and future coastal hazards? What modifications are required to address these hazards? Does infrastructure need to be relocated? Does redundant infrastructure need to be constructed (for example, if the primary evacuation route/road for an area is likely to be washed away during an event, then a backup route needs to be identified)? This project is intended to look specifically at the public infrastructure, its vulnerabilities, and requirements concerning coastal hazards. It will also make recommendations to mitigate those risks and concerns.

Impact of Denial/Postponement: The DPW has not prepared to address the changing coastal hazards. The Department lacks the modeling capability and expertise to adequately predict what public infrastructure needs to be addressed and how. Denial of this proposal will leave the department without an adequate plan to address what are predicted to be critical vulnerabilities.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$225,000
	Total Project Cost	None	\$225,000

Basis for Cost Estimates: DPW estimate

Project Estimated Completion Date: 2021 Design & Permit (months) 18 Construction (months) 0

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	None	
2020	\$225,000	Master Plan Development
2021	TBD	Resulting Projects
2022	TBD	Resulting Projects

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: To be determined

DEPARTMENT PRIORITY: 40 of 45

PROJECT: PW-18-40

Project Working Title: DPW Salt Storage Facility

Project Location: 382 Falmouth Road, Hyannis, MA 02601

Project Description: This involves the demolition of the existing salt shed and the design and construction of a new 13,000 SF salt shed with 6,500-ton storage capacity.

Project Justification: The Town has two existing salt sheds, which are located at the DPW and the transfer station. Together, the capacity of both salt sheds yields approximately 4,000 tons of salt. The existing salt storage does not provide enough capacity to perform best management practices during a major snowstorm event. Also, inconsistent salt deliveries provide unreliable response during snow emergencies. The proposed salt shed at the DPW would provide adequate storage for one winter season, which would increase the effectiveness to respond to snow emergencies.

Impact of Denial/Postponement: Failure to construct this project will decrease the Department's effectiveness during snow emergency responses. In addition, further deterioration of the existing salt shed would result in failure long-term.

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	None	\$1,630,000
	Project Management	None	\$163,000
	Project Contingency	None	\$82,000
	Total Project Cost	None	\$1,875,000

Basis for Cost Estimates: DPW Engineering Division Estimates

Project Estimated Completion Date: 2021 Design & Permit (months) 6 Construction (months) 6

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	None	
2020	\$1,875,000	Design & Construction of a Salt Shed

Source of Funding: General Fund Reserves

Operating Budget Impact now or in future: To be determined



DPW Salt Storage Facility

Project Working Title: Cape Cod Rail Trail Extension Shared Use Path Sandwich to Yarmouth -Design

Project Location: Adjacent to the Service Road in Barnstable from the Sandwich Town Line to a connection to the existing shared use pathway at Route 132 and a terminal facility near the Hyannis Golf Course.

Project Description: Full ground survey, engineering design and permitting for a proposed shared use path. The path will meet all local, state and federal standards as applicable. Preparation of materials and conducting public outreach sessions. The project is proposed to be divided into three phases in Barnstable; the first from the Sandwich Town Line to Route 149, the second from Route 149 to Route 132 and the third including a bridge and associated work to cross Route 132 to Mary Dunn Road.

Project Justification: This project is a significant link in the "vision" to create an off road path from the Cape Cod Canal to Provincetown. At this time, construction is underway on a section of the path terminating at Station Avenue in Yarmouth and plans have been developed to the 25% design stage for the path extension from the Yarmouth Town Line to Mary Dunn Road in Barnstable. To the west, construction is underway on a section of the path in Sandwich and a Project Information Form has been submitted to MADOT for the section of path in Sandwich from Route 130 to the Barnstable Town Line.

Impact of Denial/Postponement: The regionally important expansion of the major shared use path connection on Cape Cod will be delayed, thereby affecting the overall economic growth of the region. Off road paths for bicycle and other non –vehicle users are a major attraction to visitors and residents alike and this link is essential to the "vision" of connectivity.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	N/A
	Construction or Acquisition	None	N/A
	Total Project Cost	None	\$2,169,999

Basis for Cost Estimates: DPW Engineering Division analysis

Project Estimated Completion Date: 2022 Design & Permit (months) 24 Construction (months) 0

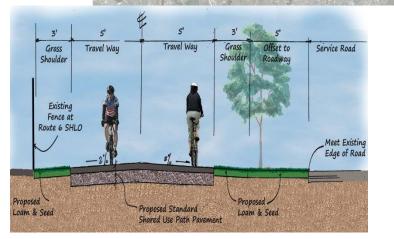
Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	None	
2020	\$723,333	Design and Permitting
2021	\$723,333	Design and Permitting
2022	\$723,333	Design and Permitting

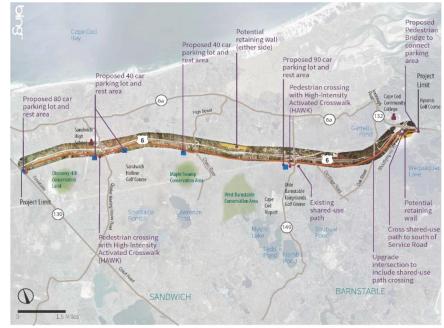
Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: It has been the standard practice for the Massachusetts Division of Conservation and Recreation to be responsible for the maintenance of completed shared use paths; however, there may be some incidental maintenance activity increase in areas connected to the facility.









Project Working Title: Barnstable Road Reconstruction Design and Construction

Project Location: Barnstable Road, Hyannis, MA 02601

Project Description: The project will consist of a complete reconstruction of Barnstable Road in Hyannis and its associated utilities. The Water Division has previously requested, and been granted, design monies for their pipe replacement. The Water Pollution Control Department is making a similar request for their pipe in this year's CIPs. This request is to cover the design of the stormwater utilities, and actual road reconstruction

Project Justification: The April 2007 Water Division Master Plan recommended that the 3,200 feet water main in Barnstable Road be replaced. The Water Pollution Control Division has sewer in the Barnstable Road that dates back to the 1930s. Barnstable Road is expected to deteriorate over the next 5-10 years. As a result, the DPW would like to take this opportunity to address all utilities and the road at once, rather than with multiple projects over a number of years. It is felt this would limit inconvenience to the citizen to one project while addressing multiple problems at once.

Impact of Denial/Postponement: Work will be accomplished in a piece-meal way. The water work will proceed, leaving a large trench patch in the road. Sewer work will be accomplished within the next 5 years leaving yet another trench patch. Storm drainage will not be addressed and the road will deteriorate.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	N/A
	Construction or Acquisition	None	N/A
	Total Project Cost	None	\$2,885,000

Basis for Cost Estimates: DPW In-house Estimate

Project Estimated Completion Date: 2022 Design & Permit (months) 12 Construction (months) 9

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	None	
2020	\$225,000	Design and Permitting
2021	None	
2022	\$2,660,000	Construction

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: To be determined





Barnstable Road

Project Working Title: South Street Improvements Design and Construction

Project Location: South Street (Main Street to Lewis Bay Road), Hyannis, MA 02601

Project Description: Design and construction of a "complete street, involving traffic flow analysis, addressing bicycle and pedestrian movement needs and installing new infrastructure including sidewalks, roadway surface and storm water upgrades.

Project Justification: South Street is one of the main transportation arteries in Hyannis. The roadway carries traffic from the west enabling access to the Cape Cod Hospital, Hyannis waterfront, arts centers, museums and the center of Town government. Several years ago, the water mains were upgraded in the roadway but only a thin overlay was provided to cover the resulting trenches. Presently the gas utilities are being replaced. Next, sewer work is scheduled. At the end of all this work, the road surface will need to be addressed. Additionally, the major signalized intersection at Old Colony, South and Ocean Street needs upgrading. The adjacent curbing and sidewalks are showing signs of disrepair. Lighting should be provided for pedestrian and vehicle safety. Drainage systems in the roadway are inadequate, resulting in major flooding in the road at times of heavy rainfall. Allocation of space in the road layout for bicycles and pedestrians will result in addressing the needs for these modes of travel and increase the accessibility to the many attractions along the roadway for local users and visitors alike.

Impact of Denial/Postponement: Failure to fund South Street improvements will result in continued deterioration of the roadway surface features and underground utilities. An opportunity to upgrade the corridor to provide excellent access to the many businesses, cultural attractions and Municipal offices will be lost. Safety issues with curb ramps and sidewalks will be exacerbated and excessive maintenance funds required to provide a minimum level of service.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$290,000
	Construction or Acquisition	None	\$2,727,000
	Project Management	None	\$275,500
	Project Contingency	None	\$420,000
	All Other Costs	None	\$105,000
	Total Project Cost	None	\$3,817,500

Basis for Cost Estimates: DPW Engineering

Project Estimated Completion Date: 2022 Design & Permit (months) 12 Construction (months) 24

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	None	
2020	\$290,000	Design and Permitting
2021	\$3,527,500	Construction

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: With new construction, extra maintenance from Highway Division will be reduced.









South Street

Project Working Title: Sidewalk installations Bumps River Rd Centerville, Main St Cotuit, South St Hyannis

Project Location: Bumps River Road, Centerville (Fuller Road to Babbling Brook Road), Main Street Cotuit (Ocean View Avenue to Freedom Hall) and South Street Hyannis (Ocean Street to Pleasant Street)

Project Description: Installation of new sidewalks at various locations in Town.

Project Justification: Citizens have brought to our attention the need for improvements to our network of sidewalks on Town arterial and connector roads. The staff has reviewed these needs, and has prioritized the requests based on safety considerations, pedestrian activity, and the speed and volume of traffic additional criterion that is also considered is location with respect to activity centers such as schools, libraries, recreational facilities, and commercial areas.

Impact of Denial/Postponement: Denial of the project will result in unresolved safety concerns (i.e. tripping hazards, etc) for pedestrians utilizing these deteriorating sidewalks.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$62,400
	Construction or Acquisition	None	\$624,800
	Project Management	None	\$10,400
	Project Contingency	None	\$69,160
	All Other Costs	None	\$31,240
	Total Project Cost	None	\$798,000

Basis for Cost Estimates: N/A

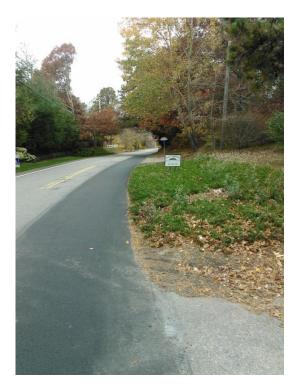
Project Estimated Completion Date: 2021	Design & Permit (months)	12	Construction (months))	8
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Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	None	
2020	\$798,000	Bumps River Road, Centerville (Fuller Road. to Bubbling Brook Road) Main Street Cotuit (Ocean View Avenue to Freedom Hall) and South Street, Hyannis , Hyannis (Ocean Street to Pleasant Street) Design & Construction.

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: This project will add to the sidewalk maintenance budget.







Bumps River Road Centerville, Main Street Cotuit, South Street Hyannis

Project Working Title: Traffic Calming

Project Location: Town-wide

Project Description: One of the demonstrated public concerns on our roadways is speeding. Our Police Department does an excellent job of patrolling our neighborhoods to warn and apprehend speeders but do not have the resources to cover all situations. The Department of Public Works Engineering Division has supplemented Police efforts by installing permanent and temporary features to address speeding vehicles. One of the most successful methods is to erect solar powered speed indicator signs at critical locations. The signs alert drivers exceeding the speed limit and collect data on vehicle count and speed.

Project Justification: Potential to decrease speed and protect pedestrians at crossings is a "raised "crossing. This is in effect a speed table with increased visibility created by colored surface, together with signage. Analysis of specific situations could mean introduction of additional features designed to slow traffic.

Impact of Denial/Postponement: The need for traffic calming measures is very high as perceived by the public and as a method to increase safety on our roads in general. Lack of attention to this demand will increase frustration in the populace and continue to tax our overburdened Police Department.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$10,000
	Construction or Acquisition	None	\$100,000
	Project Management	None	\$5,000
	Project Contingency	None	\$20,000
	Total Project Cost	None	\$135,000

Basis for Cost Estimates: DPW Engineering Division analysis

Project Estimated Completion Date: 2021 Design & Permit (months) 3 Construction (months) 24

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	None	
2020	\$67,500	Design and Construction
2021	\$67,500	Design and Construction

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: Installation of features such as solar speed signs will require maintenance by the DPW Highway Division in case of damage, data gathering will be an added component to DPW administration staff.





Traffic Calming Devices

2018 CIP - Deferred Public Works General Fund Projects

Police General Fund Projects

PROJECT: POL-18-1

DEPARTMENT PRIORITY: 1 of 2

Project Working Title: Barnstable Police Department Window Replacement

Project Location: 1200 Phinney's Lane, Hyannis, MA 02601

Project Description: The Police Department facility was constructed over 30 years ago. The windows in the original building are coming to the end of their useful life and need replacement.

Project Justification: The Police Department Facility is one of the most heavily used buildings in Town. The facility is utilized 24/7 and as such building elements are worn out and need to be replaced. This building will need to service Barnstable for a very long time into the future.

Impact of Denial/Postponement: Windows will continue to deteriorate, compromising energy efficiency and will allow the continued deterioration of the building envelope. Inflation will continue to erode purchasing power.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$111,600
	Construction or Acquisition	None	\$620,000
	Project Management	None	\$40,000
	Project Contingency	None	\$75,000
	Total Project Cost	None	\$846,600

Basis for Cost Estimates: Architect assisted in-house estimate

Project Estimated Completion Date: 2021	Design & Permit (months)	6	Construction (months)	8
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Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	None	
2020	\$846,600	Design & Construction

Source of Funding: Possible Community Preservation Act (CPC) funding

Operating Budget Impact now or in future: This project is to stabilize an existing Town building and would require marginal increase in utility costs.









Police Department Exterior Windows

School Department Projects

PROJECT: SCH-18-6

DEPARTMENT PRIORITY: 6 of 29

Project Working Title: Hyannis West Walk-In Cooler Replacement

Project Location: 549 West Main Street, Hyannis, MA 02601

Project Description: Replace walk-in coolers at Hyannis West Elementary School

Project Justification: Existing Equipment at end of life, reliability and efficiency issues.

Impact of Denial/Postponement: Denial or postponement will result in the continued expense for repairs to operate equipment and the replacement of spoiled food.

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	\$80,000	None
	Project Contingency	\$20,000	None
	Total Project Cost	\$100,000	None

Basis for Cost Estimates: Vendor Budgetary Costs

Project Estimated Completion Date: 2017 Design & Permit (months) 1 Construction (months) 4

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$100,000	Replace Walk-In Coolers at Hyannis West Elementary

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: To be determined





Project Working Title: Campus-wide Mechanical Upgrades (Burners, Boilers, HVAC and Pumps)

Project Location: BPS District-wide

Project Description: District-wide mechanical system upgrade to include boilers, burners and pumps at all school owned buildings including Osterville and Cotuit.

Project Justification: Much of our existing equipment is over 30 years old and requires replacement and/or upgrade.

Impact of Denial/Postponement: Denial or postponement of this project could result in heating system failure with the possibility of facility damage due to frozen pipes, etc.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	\$75,000	None
	Construction or Acquisition	None	\$750,000
	Total Project Cost	\$75,000	\$750,000

Basis for Cost Estimates: Budgetary Estimates

Project Estimated Completion Date: 2020 Design & Permit (months) 12 Construction (months) 36

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$75,000	Engineering
2019	\$250,000	Mechanical Upgrades
2020	\$250,000	Mechanical Upgrades
2021	\$250,000	Mechanical Upgrades

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: Will have a positive impact on operating expenses by upgrading 30 year old units with high efficiency equipment.



Boiler System

DEPARTMENT PRIORITY: 9 of 29

PROJECT: SCH-18-9

Project Working Title: Replace HVAC Roof Top Units (RTU's) at Barnstable High School and Barnstable Intermediate School

Project Location: 744 West Main Street and 895 Falmouth Road, Hyannis, MA 02601

Project Description: Engineering evaluation and specification generation for replacement of RTU's at BHS and BIS.

Project Justification: Existing Nesbitt and Trane Units are obsolete and parts are becoming increasingly difficult to obtain.

Impact of Denial/Postponement: Denial or postponement of this project will most likely result in eventual total failure and inability to heat and cool classroom spaces.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	\$100,000	None
	Construction or Acquisition	None	\$6,500,000
	Total Project Cost	\$100,000	\$6,500,000

Basis for Cost Estimates: Engineering Estimates

Project Estimated Completion Date: N/A	Design & Permit (months)	6	Construction (months)	36
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Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$100,000	Engineering & Specifications
2019	\$1,000,000	BIS/BHS RTU Replacement
2020	\$1,000,000	BIS/BHS RTU Replacement
2021	\$2,000,000	BIS/BHS RTU Replacement
2022	\$2,500,000	BIS/BHS RTU Replacement

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: We would expect to benefit from 20% savings in operating energy costs each unit installed, (20 units).



HVAC Roof Top Units (RTU's) at Barnstable High School and Barnstable Intermediate School

Project Working Title: Upgraded Modular Office Space (BPS Transportation & Food Services)

Project Location: 744 West Main Street and 845 Falmouth Road, Hyannis, MA 02601

Project Description: Replacement of existing modular office space for Transportation and Food Service Personnel.

Project Justification: Existing office space (s) are 30+ years old and in poor condition. Exterior walls and roofing are deteriorating causing severe air and water infiltration. The resulting gaps and spaces are providing access for pests and rodents affecting the ability to provide a healthy and comfortable work environment.

Impact of Denial/Postponement: Postponement or denial of this request places our employees at a health risk and can affect productivity and quality of work.

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	\$300,000	None
	Total Project Cost	\$300,000	None

Basis for Cost Estimates: Vendor Quotes

Project Estimated Completion Date: 2017 Design & Permit (months) 2 Construction (months) 2

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$300,000	New Modular Office Space (Transportation/Food Service)

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: N/A



Barnstable Public Schools Transportation and Food Services Trailers

Project Working Title: West Villages Elementary Emergency Generator Replacement

Project Location: 760 Osterville – West Barnstable Road, Marstons Mills, MA, 02648

Project Description: Replacement of existing emergency generator

Project Justification: Existing unit is becoming costly to maintain and unreliable.

Impact of Denial/Postponement: Denial of this project would affect the safety and operation of the facility in the event of power outage during class/programs sessions and winter storm events , (ie: Emergency lighting, lack of heating/cooling and frozen pipes).

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	\$80,000	None
	Project Contingency	\$10,000	None
	All Other Costs	\$10,000	None
	Total Project Cost	\$100,000	None

Basis for Cost Estimates: Vendor Quotes

Project Estimated Completion Date: 2017 Design & Permit (months) 0 Construction (months) 4

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$100,000	Purchase and installation of 70kW Emergency Generator

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: The replacement of this unit will reduce increasing maintenance and costs.





West Villages Elementary Emergency Generator

Project Working Title: Hyannis West Elementary School Exterior / Interior Door Replacement

Project Location: 549 West Main Street, Hyannis, MA 02601

Project Description: Upgrade and replace aged/dated interior and exterior doors throughout building to improve security and energy savings.

Project Justification: Existing doors are >50 years old and in need of replacement. Current units are warped to the point where air/rodent infiltration has become an issues and building security is at risk.

Impact of Denial/Postponement: Denial or postponement of this request will lead to further deterioration of door assemblies and increased maintenance costs.

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	\$100,000	\$100,000
	Total Project Cost	\$100,000	\$100,000

Basis for Cost Estimates: Budgetary vendor quotes and past installations.

Project Estimated Completion Date: 2019 Design & Permit (months) 1 Construction (months) 4

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$100,000	Construction Exterior / Interior Door Replacement

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future:







Hyannis West Elementary School Exterior/Interior Doors

DEPARTMENT PRIORITY: 14 of 29

PROJECT: SCH-18-14

Project Working Title: Facilities Maintenance Shop Roof Replacement

Project Location: 835 Falmouth Road, Hyannis, MA 02601

Project Description: Replacement and repair of the existing 40+ year roof of the Facilities Department building.

Project Justification: We are experiencing leaks throughout the building and have birds nesting in gaps between the soffit and roof. The building houses all of the district's equipment, supplies and files which need to be protected.

Impact of Denial/Postponement: Denial or postponement of this request will result in continued deterioration and leaks causing damage to district equipment and supplies.

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	\$75,000	None
	Total Project Cost	\$75,000	None

Basis for Cost Estimates: Budgetary Estimates

Project Estimated Completion Date: 2017 Design & Permit (months) 1 Construction (months) 2

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$75,000	Replacement of roof

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: N/A



School Facilities Maintenance Shop Roof

Project Working Title: BPS Campus-wide Painting

Project Location: All District Locations

Project Description: Paint District Buildings and Facilities

Project Justification: Preventative Maintenance and Aesthetics

Impact of Denial/Postponement: Denial or postponement of this project will affect visual appearance and life of interior/exterior surfaces of district buildings.

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	\$100,000	\$300,000
	Total Project Cost	\$100,000	\$300,000

Basis for Cost Estimates: N/A

Project Estimated Completion Date: 2020 Design & Permit (months) 0 Construction (months) 48

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$100,000	Painting
2019	\$100,000	Painting
2020	\$100,000	Painting
2021	\$100,000	Painting

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: N/A

Project Working Title: BPS Campus-wide Paving

Project Location: Campus-wide

Project Description: Pave and repair campus parking lots and sidewalks as needed.

Project Justification: Safety and maintenance

Impact of Denial/Postponement: Denial or postponement will result in continued deterioration to school/town properties and assets.

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	\$225,000	\$950,000
	Total Project Cost	\$225,000	\$950,000

Basis for Cost Estimates: In-house estimates provided by TOB DPW

Project Estimated Completion Date: 2020 Design & Permit (months) 3 Construction (months) 48

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$225,000	Paving/Masonry/Crack Sealing
2019	\$250,000	Paving/Masonry/Crack Sealing
2020	\$300,000	Paving/Masonry/Crack Sealing
2021	\$400,000	Paving/Masonry/Crack Sealing

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: N/A



School Sidewalks and Road Entrance

Project Working Title: Field House Improvements

Project Location: 744 West Main Street, Hyannis, MA 02601

Project Description: Repairs to Barnstable High School's Field House (FH) interior space and floors. The Field House's open room design allows for ultimate Athletic and Wellness program flexibility and is large enough to host large community events and town meetings.

We use the FH for both our Freshman and JV volleyball practice and games. It is also used in the fall on inclement weather days by Football, Field Hockey, Boys Soccer, and Girls Soccer teams as a practice facility during the week. It is used on Saturday mornings as a workout area for JV /Varsity Football. We also host multiple school pre-season Volleyball Play date. In the winter, it is used for sub-varsity Boys & Girls Basketball practices and as a Winter Track training facility both during the week and on Saturdays. We also host Wrestling tournaments. In the spring, due to the nature of New England weather, all of our spring sports use the facility for indoor training. Softball, Baseball, Boys and Girls Lacrosse, Boys and Girls Tennis, Boys and Girls Track & Field all use the Field House extensively when we often are unable to get outside.

The scope includes replacement of the field house floor, painting and equipment replacement.

Project Justification: Require floor and equipment replacement and painting due to continued use of space.

Impact of Denial/Postponement: Postponement of this work will promote additional deterioration and impact safety.

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	\$250,000	\$250,000
	Total Project Cost	\$250,000	\$250,000

Basis for Cost Estimates: Budgetary estimates.

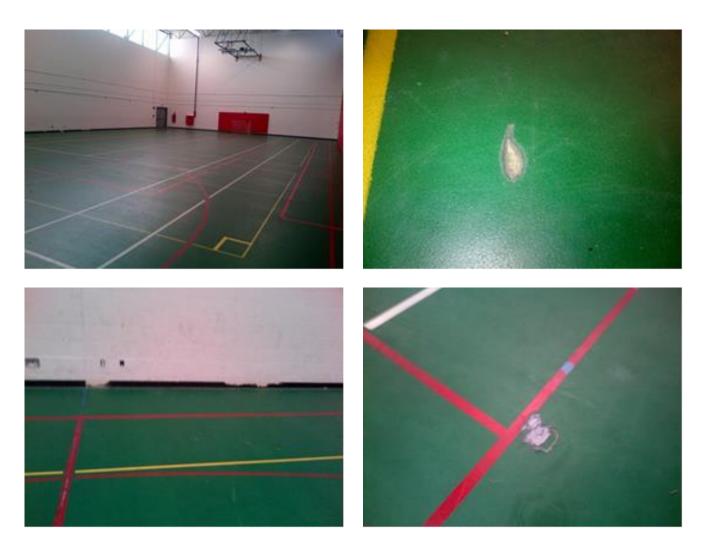
Project Estimated Completion Date: 2019 Design & Permit (months) 4 Construction (months) 18

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$250,000	Construction
2019	\$250,000	Construction

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: N/A



Barnstable High School Field House Floor

Project Working Title: Barnstable United Courtyard Improvements

Project Location: 730 Osterville-West Barnstable Road, Marstons Mills, MA 02648

Project Description: This project seeks to improve the school's central courtyard, which once housed a manmade combination pond, and wetlands area that had significantly contributed to major building moisture infiltration issues. Through student, staff and private contractor efforts, the entire system was removed (2012 - 2014).

Now the court yard is almost entirely concrete hardscape. The project will redesign the courtyard to include a greater landscape to hardscape ratio, featuring increased areas for local absorption of storm water via drought-tolerant landscaped areas, pervious paving and bioswales. The improved courtyard will reduce storm water runoff and provide an outdoor educational environment that facilitates curriculum for science programs, geography, art programs such as photography and 2D art, and liberal arts such as English composition. Through hands-on interpretative environmental opportunities, and sustainable design principals. Teachers and students will use the courtyard as an evolving laboratory for their academic disciplines.

Research has shown that being outdoors increases students' attention spans and that hands-on nature study improves academic performance. Kuo and Taylor's 2004 study suggests that exposure to nature ("green time") can be used as treatment for attention deficit / hyperactivity disorder. A 2014 study published in the journal Health and Place, conducted by a team led by Dr. Louise Chawla, environmental psychologist and professor at the University of Colorado, concluded that access to nature reduced stress and promoted resilience; the study's findings confirm that when students are given naturalized environments in which to play and learn there is a reduction in stress, anger and inattentiveness.

Project Justification: This funding is needed to complete the project and make the courtyard a more usable and appropriate space for school and community use.

Impact of Denial/Postponement: Denial or postponement of this project will render the courtyard space unusable with loss of educational programing opportunities.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	\$20,000	None
	Construction or Acquisition	\$80,000	None
	Total Project Cost	\$100,000	None

Basis for Cost Estimates: Budgetary Estimates

Project Estimated Completion Date: 2019 Design & Permit (months) 2 Construction (months) 18

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$100,000	Construction, Design & Permitting

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: To be determined









Barnstable United Courtyard

Project Working Title: Centerville Elementary School Elevator Project

Project Location: 658 Bay Lane, Centerville, MA 02632

Project Description: Replace existing wheel chair lift with conventional 2-stop elevator car.

Project Justification: Existing configuration is not suitable for growing population of students needing daily access elevator service between floors.

Impact of Denial/Postponement: Denial or postponement of this request will result in continued use of wheelchair lift, which is not suited for continuous daily use.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	\$20,000	None
	Construction or Acquisition	\$220,000	None
	Project Contingency	\$10,000	None
	Total Project Cost	\$250,000	None

Basis for Cost Estimates: N/A

Project Estimated Completion Date: 2018 Design & Permit (months) 3 Construction (months) 6

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components	
2018	\$250,000	Elevator install and components	

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: To be determined







Centerville Elementary School Elevator

Project Working Title: Electric Utility Transformer Upgrade

Project Location: Barnstable West Barnstable Elementary, Barnstable Community Horace Mann Charter Public School, Osterville Elementary, Cotuit Elementary

Project Description: All four of these locations are still electrically serviced by transformers, which are housed in on-site underground vaults. These transformers should be removed and replaced with above ground transformers and all service panels should be upgraded.

Project Justification: Increased Safety and Reliability

Impact of Denial/Postponement: Denial or postponement of this request could adversely affect service in the event of a transformer failure.

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	\$275,000	None
	Project Contingency	\$25,000	None
	Total Project Cost	\$300,000	None

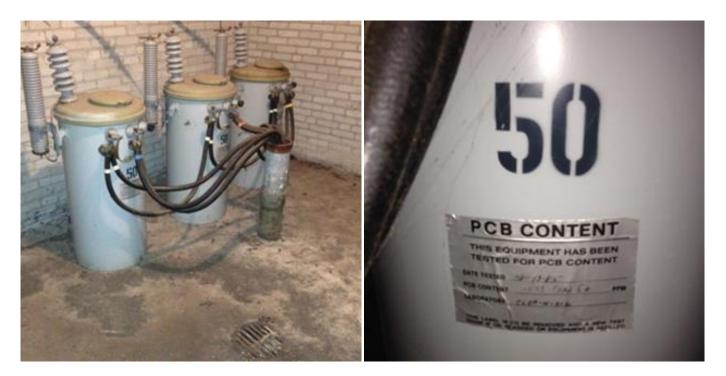
Basis for Cost Estimates: Historical Costs for similar projects

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$300,000	Construction

Source of Funding: Available \$50,000 from lease revenue for the Cotuit and Osterville sites to supplement project costs.

Operating Budget Impact now or in future: To be determined



Underground Transformers

Project Working Title: District Masonry Personnel

Project Location: BPS District-wide

Project Description: Provide capital funded position (annually funded) to perform miscellaneous masonry projects district-wide.

Project Justification: Funding of this project as a capital project would allow for cost effective repair of district masonry structures.

Impact of Denial/Postponement: Many district facilities are requiring immediate attention to varied miscellaneous masonry and tile repairs. If these conditions are allowed to continue unchecked, our facilities will continue to deteriorate to the state of major repair.

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	\$100,000	\$400,000
	Total Project Cost	\$100,000	\$400,000

Basis for Cost Estimates: Prevailing rates for concrete mason

Project Estimated Completion Date: TBD Design & Permit (months) 0 Construction (months) 0

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$100,000	In-house capital funded mason.
2019	\$100,000	In-house capital funded mason.
2020	\$100,000	In-house capital funded mason.
2021	\$100,000	In-house capital funded mason.
2022	\$100,000	In-house capital funded mason.

Source of Funding: General Fund

Operating Budget Impact now or in future: Personnel costs associated with the position.

Project Working Title: Flooring Replacement and Upgrades

Project Location: Multiple

Project Description: This is a multi-year project to begin the replacement of worn tile, carpet and vinyl flooring throughout school district.

Project Justification: Existing flooring becoming worn and tattered in all school throughout the district including gym floors.

Impact of Denial/Postponement: Denial or postponement of this request will result in continued deterioration of existing flooring and cause safety issues.

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	\$100,000	\$400,000
	Total Project Cost	\$100,000	\$400,000

Basis for Cost Estimates: Vendor Quotes

Project Estimated Completion Date: 2018 Design & Permit (months) 1 Construction (months) 3

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$100,000	Flooring Replacement
2019	\$100,000	Flooring Replacement
2020	\$100,000	Flooring Replacement
2021	\$100,000	Flooring Replacement
2022	\$100,000	Flooring Replacement

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: To be determined



Worn Tile, Carpet and Vinyl Flooring Throughout School District

Project Working Title: Centerville Elementary School Window Replacement

Project Location: 658 Bay Lane, Centerville, MA 02632

Project Description: This project involves the replacement of the 1950's era single pane windows with thermopane units. With the exception of the windows on the front of the building (replaced FY08/FY09) current windows are drafty and damp, and will be replaced with more fuel efficient windows.

Project Justification: Existing units are leaking and inefficient, failure to replace will result in security, maintenance and energy consumption issues. Existing windows allow the following:

- Uncomfortable classroom climates in the afternoons due to solar gain, with no air conditioning available;
- Actions of vandals and the accidents of students at recess allow easy breakage; and
- Heat that the boilers manufactured to keep students and staff able to learn is easily transferred outside stressing the heating plant during cool periods.

Impact of Denial/Postponement: Single pane windows will continue to hamper the education of children, a cause of frustration for teachers, and a waste of energy dollars as a continual source of repair work orders for the maintenance staff. Unsafe window sections will continue to be repaired and possibly replaced with inferior solutions to prevent accidents to children.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	\$100,000	None
	Construction or Acquisition	None	\$900,000
	Project Contingency	None	\$100,000
	Total Project Cost	\$100,000	\$1,000,000

Basis for Cost Estimates: Budgetary estimate based upon similar district projects.

Project Estimated Completion Date: 2019 Design & Permit (months) 6 Construction (months) 24

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$100,000	Design and bid documents, construction estimates
2019	\$1,000,000	Window replacement.

Source of Funding: Project will be submitted to the Massachusetts School Building Authority for partial funding if selected

Operating Budget Impact now or in future: To be determined





Centerville Elementary School Windows

Project Working Title: Field / Ground Improvements

Project Location: Multiple

Project Description: Upgrades and modifications to existing Barnstable High School and Barnstable Intermediate School athletic fields and grounds.

Project Justification: Current athletic fields and grounds are outdated and not able to support play at Division I levels, additional JV fields and fields located at Barnstable Intermediate School require rework and maintenance.

Impact of Denial/Postponement: Denial or postponement poses safety issues associated with poor playing conditions and overcrowding of existing space due to poor layout and configuration of current space.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$100,000
	Construction or Acquisition	None	\$4,700,000
	Project Contingency	None	\$200,000
	Total Project Cost	None	\$5,000,000

Basis for Cost Estimates: Budgetary Engineering Estimates.

Project Estimated Completion Date: 2021	Design & Permit (months)	12	Construction (months)	36
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Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	\$1,000,000	Engineering/Permitting/Construction
2020	\$1,000,000	Engineering/Permitting/Construction
2021	\$1,000,000	Engineering/Permitting/Construction
2022	\$2,000,000	Engineering/Permitting/Construction

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: To be determined

DEPARTMENT PRIORITY: 26 of 29

PROJECT: SCH-18-26

Project Working Title: Synthetic Turf Replacement

Project Location: 744 West Main Street, Hyannis, MA 02601

Project Description: Replace Field Synthetic Turf

Project Justification: Existing turf is at end of 10 year life expectancy (Installed November 22, 2010)

Impact of Denial/Postponement: Denial or postponement of this request could result in rapid deterioration of playing surface and potential for unsafe playing conditions.

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	None	\$1,000,000
	Total Project Cost	None	\$1,000,000

Basis for Cost Estimates: Estimates from engineering and turf contractors

Project Estimated Completion Date: 2021 Design & Permit (months) 3 Construction (months) 4

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	None	
2020	None	
2021	\$1,000,000	Design, bid documents and construction

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: To be determined



Barnstable High School Synthetic Turf

Project Working Title: Hyannis West Elementary Roof Replacement

Project Location: 549 West Main Street, Hyannis, MA 02601

Project Description: Replace existing shingled roof.

Project Justification: Existing roof is > 20 years old and is nearing end of life.

Impact of Denial/Postponement: Denial or postponement of this request may result in interior water damage.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$25,000
	Construction or Acquisition	None	\$240,000
	Project Contingency	None	\$25,000
	Total Project Cost	None	\$290,000

Basis for Cost Estimates:

Project Estimated Completion Date: 2018 Design & Permit (months) 3 Construction (months) 3

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	\$290,000	Hyannis West Elementary Roof Replacement

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future: To be determined



Hyannis West Elementary Roof

Project Working Title: Centerville Elementary Roof Replacement

Project Location: 658 Bay Lane, Centerville, MA 02632

Project Description: Replace existing shingled roof.

Project Justification: Existing roof is > 20 years old and is nearing end of life.

Impact of Denial/Postponement: Denial or postponement of this request may result in interior water damage.

Project Cost Estimates:		FY 2018	Future FY
	Design & Permitting	None	\$12,000
	Construction or Acquisition	None	\$120,000
	Project Contingency	None	\$12,000
	Total Project Cost	None	\$145,000

Basis for Cost Estimates:

Project Estimated Completion Date: 2018 Design & Permit (months) 3 Construction (months) 3

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	None	
2019	\$145,000	Centerville Elementary Roof Replacement

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future:



Centerville Elementary Roof Replacement

Project Working Title: Bubbler and Water Cooler Replacement

Project Location: District-wide

Project Description: Replacement of existing water coolers and bubblers.

Project Justification: Existing drinking fountains are 20 to 50 years old and at the end of life. Additionally, current concerns regarding lead and copper levels in drinking water warrant strong consideration for replacement.

Impact of Denial/Postponement: Denial or postponement of this project could result in issues with the supply of quality drinking water in our school facilities.

Project Cost Estimates:		FY 2018	Future FY
	Construction or Acquisition	\$75,000	None
	Total Project Cost	\$75,000	None

Basis for Cost Estimates: Costs determined using budgetary market pricing.

Project Estimated Completion Date: 2018 Design & Permit (months) 1 Construction (months) 12

Cost/Description FY 2018 and Follow-On Years:

Fiscal Year	Cost	Project Description/Components
2018	\$75,000	District wide bubbler & drinking fountain replacement.

Source of Funding: Capital Trust Fund Reserves

Operating Budget Impact now or in future:



Bubbler

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APPENDIX A – FISCAL YEAR 2018 CAPITAL BUDGET APPROPRIATIONS ORDERS

2017-062 APPROPRIATION AND LOAN ORDER General Fund Capital Improvement Plan (Two-thirds vote)

ORDERED:

That the sum of **\$250,000** be appropriated for the purpose of funding the Barnstable Public School Unit Ventilator Upgrade Project as outlined in the FY 2018 - FY 2022 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow **\$250,000**, and that in accordance with Chapter 44, Section 20 of the General Laws, any premium received by the Town upon the sale of any bonds or notes thereunder, less any such premium applied to the payment of the costs of issuance of such bonds and notes, may be applied to pay such project costs, and that the Barnstable School Committee is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

2017-063 APPROPRIATION TRANSFER AND LOAN ORDER General Fund Capital Improvement Plan (Two-thirds vote)

ORDERED:

That the sum of **\$3,500,363** be appropriated for the purpose of funding the Barnstable High School 21st Century Learning Space Project as outlined in the FY 2018 - FY 2022 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow **\$3,158,000**, and that in accordance with Chapter 44, Section 20 of the General Laws, any premium received by the Town upon the sale of any bonds or notes thereunder, less any such premium applied to the payment of the costs of issuance of such bonds and notes, may be applied to pay such project costs, and that **\$342,363** be transferred from the remaining available balances in previously approved Town Council orders as follows:

Council Order 2013-105	\$4,798
Council Order 2013-106	\$9,964
Council Order 2014-092	\$2,197
Council Order 2014-093	\$9,826
Council Order 2014-096	\$10,920
Council Order 2015-045	\$13,685
Council Order 2015-115	\$13,499
Council Order 2015-116	\$172,715
Council Order 2015-119	\$54,759
Council Order 2015-121	\$50,000

and that the Barnstable School Committee is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

2017-064 APPROPRIATION AND TRANSFER ORDER General Fund Capital Improvement Plan (Majority Vote)

ORDERED:

That the sum of **\$250,000** be appropriated for the purpose of funding the Barnstable Public School Network Infrastructure Upgrades Project as outlined in the FY 2018 - FY 2022 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that **\$250,000** be transferred from available funds within the General Fund Reserves, and that the Barnstable School Committee is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

2017-065 APPROPRIATION AND TRANSFER ORDER General Fund Capital Improvement Plan (Majority Vote)

ORDERED:

That the sum of **\$100,000** be appropriated for the purpose of funding the Barnstable Public School Communications and Security Network Upgrades Project as outlined in the FY 2018 - FY 2022 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that **\$100,000** be transferred from available funds within the General Fund Reserves, and that the Barnstable School Committee is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

2017-066 APPROPRIATION AND LOAN ORDER

General Fund Capital Improvement Plan (Two-thirds vote)

ORDERED:

That the sum of **\$300,000** be appropriated for the purpose of funding the Barnstable Public School Asbestos Abatement Project as outlined in the FY 2018 - FY 2022 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow **\$300,000**, and that in accordance with Chapter 44, Section 20 of the General Laws, any premium received by the Town upon the sale of any bonds or notes thereunder, less any such premium applied to the payment of the costs of issuance of such bonds and notes, may be applied to pay such project costs, and that the Barnstable School Committee is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

2017-067 APPROPRIATION AND LOAN ORDER General Fund Capital Improvement Plan (Two-thirds vote)

ORDERED:

That the sum of **\$1,055,000** be appropriated for the purpose of funding the Barnstable High School Stadium Bleachers Project as outlined in the FY 2018 - FY 2022 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow **\$1,055,000**, and that in accordance with Chapter 44, Section 20 of the General Laws, any premium received by the Town upon the sale of any bonds or notes thereunder, less any such premium applied to the payment of the costs of issuance of such bonds and notes, may be applied to pay such project costs, and that the Barnstable School Committee is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

2017-068 APPROPRIATION AND LOAN ORDER General Fund Capital Improvement Plan (Two-thirds vote)

ORDERED:

That the sum of **\$425,000** be appropriated for the purpose of funding the Barnstable High School Cafeteria Storefront and Window Replacement and the Barnstable West Barnstable Elementary School Roof Replacement Projects as outlined in the FY 2018 - FY 2022 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow **\$425,000**, and that in accordance with Chapter 44, Section 20 of the General Laws, any premium received by the Town upon the sale of any bonds or notes thereunder, less any such premium applied to the payment of the costs of issuance of such bonds and notes, may be applied to pay such project costs, and that the Barnstable School Committee is authorized to accept any grants or gifts in relation thereto.

2017-069 APPROPRIATION AND LOAN ORDER General Fund Capital Improvement Plan (Two-thirds vote)

ORDERED:

That the sum of **\$560,000** be appropriated for the purpose of funding the Town Hall Restroom Renovations Project as outlined in the FY 2018 - FY 2022 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow **\$560,000**, and that in accordance with Chapter 44, Section 20 of the General Laws, any premium received by the Town upon the sale of any bonds or notes thereunder, less any such premium applied to the payment of the costs of issuance of such bonds and notes, may be applied to pay such project costs, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

2017-070 APPROPRIATION AND TRANSFER ORDER

General Fund Capital Improvement Plan (Two-thirds Vote)

ORDERED:

That the sum of **\$116,000** be appropriated for the purpose of funding the Town Hall and School Administration Building Masonry Sealer Project as outlined in the FY 2018 - FY 2022 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that **\$116,000** be transferred from available funds within the Capital Trust Fund, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

2017-071 APPROPRIATION AND TRANSFER ORDER General Fund Capital Improvement Plan (Two-thirds Vote)

ORDERED:

That the sum of **\$3,250,000** be appropriated for the purpose of funding the Public Roads Improvement Program as outlined in the FY 2018 - FY 2022 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that **\$3,250,000** be transferred from available funds within the Capital Trust Fund, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

2017-072 APPROPRIATION AND TRANSFER ORDER

General Fund Capital Improvement Plan (Majority Vote)

ORDERED:

That the sum of **\$235,000** be appropriated for the purpose of funding the JFK Museum Plaza Replacement Project as outlined in the FY 2018 - FY 2022 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that **\$120,000** be transferred from the available funds remaining under Town Council Order 2013-115 and the **\$115,000** be transferred from the available funds remaining under Town Council Order 2014-101, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

2017-073 APPROPRIATION AND LOAN ORDER General Fund Capital Improvement Plan (Two-thirds vote)

ORDERED:

That the sum of **\$314,000** be appropriated for the purpose of funding the Guardrail, Sidewalk and Crosswalk Improvement Program as outlined in the FY 2018 - FY 2022 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow **\$314,000**, and that in accordance with Chapter 44, Section 20 of the General Laws, any premium received by the Town upon the sale of any bonds or notes thereunder, less any such premium applied to the payment of the costs of issuance of such bonds and notes, may be applied to pay such project costs, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

2017-074 APPROPRIATION AND LOAN ORDER

General Fund Capital Improvement Plan (Two-thirds vote)

ORDERED:

That the sum of **\$350,000** be appropriated for the purpose of funding the West Barnstable Shooting Range Improvement Project as outlined in the FY 2018 - FY 2022 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow **\$350,000**, and that in accordance with Chapter 44, Section 20 of the General Laws, any premium received by the Town upon the sale of any bonds or notes thereunder, less any such premium applied to the payment of the costs of issuance of such bonds and notes, may be applied to pay such project costs, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

2017-075 APPROPRIATION AND TRANSFER ORDER Water Pollution Control Enterprise Fund Capital Improvement Plan (Majority Vote)

ORDERED:

That the sum of **\$200,000** be appropriated for the purpose of funding the Pump Station Evaluation Project as outlined in the FY 2018 - FY 2022 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that **\$200,000** be transferred from the Water Pollution Control Enterprise Fund Reserves, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

2017-076 APPROPRIATION AND TRANSFER ORDER

Water Pollution Control Enterprise Fund Capital Improvement Plan (Majority Vote)

ORDERED:

That the sum of **\$55,000** be appropriated for the purpose of funding the Acquisition of a New Vehicle as outlined in the FY 2018 - FY 2022 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that **\$55,000** be transferred from the Water Pollution Control Enterprise Fund Reserves, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

2017-077 APPROPRIATION AND TRANSFER ORDER

Water Pollution Control Enterprise Fund Capital Improvement Plan (Majority Vote)

ORDERED:

That the sum of **\$55,000** be appropriated for the purpose of funding the Development of a Computerized Wastewater Treatment Plant Simulation Model for the Hyannis Water Pollution Control Facility as outlined in the FY 2018 - FY 2022 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that **\$55,000** be transferred from the Water Pollution Control Enterprise Fund Reserves, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

2017-078 APPROPRIATION AND TRANSFER ORDER

Water Pollution Control Enterprise Fund Capital Improvement Plan (Majority Vote)

ORDERED:

That the sum of **\$72,000** be appropriated for the purpose of funding the Evaluation and Design of the Barnstable Road Sewer System Upgrades as outlined in the FY 2018 - FY 2022 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that **\$72,000** be transferred from the Water Pollution Control Enterprise Fund Reserves, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

2017-079 APPROPRIATION AND LOAN ORDER Water Supply Enterprise Fund Capital Improvement Plan (Two-thirds Vote)

ORDERED:

That the sum of **\$491,000** be appropriated for the purpose of funding Lease Buy-out of (3) Activated Carbon Filter Units at the Mary Dunn Wells as outlined in the FY 2018 - FY 2022 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow **\$491,000**, and that in accordance with Chapter 44, Section 20 of the General Laws, any premium received by the Town upon the sale of any bonds or notes thereunder, less any such premium applied to the payment of the costs of issuance of such bonds and notes, may be applied to pay such project costs, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

2017-080 APPROPRIATION AND LOAN ORDER

Water Supply Enterprise Fund Capital Improvement Plan (Two-thirds Vote)

ORDERED:

That the sum of **\$295,000** be appropriated for the purpose of funding the Well Reactivation Project as outlined in the FY 2018 - FY 2022 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow **\$295,000**, and that in accordance with Chapter 44, Section 20 of the General Laws, any premium received by the Town upon the sale of any bonds or notes thereunder, less any such premium applied to the payment of the costs of issuance of such bonds and notes, may be applied to pay such project costs, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

2017-081 APPROPRIATION AND LOAN ORDER

Water Supply Enterprise Fund Capital Improvement Plan (Two-thirds Vote)

ORDERED:

That the sum of **\$500,000** be appropriated for the purpose of funding the Pipe Replacement and Upgrade Project as outlined in the FY 2018 - FY 2022 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow **\$500,000**, and that in accordance with Chapter 44, Section 20 of the General Laws, any premium received by the Town upon the sale of any bonds or notes thereunder, less any such premium applied to the payment of the costs of issuance of such bonds and notes, may be applied to pay such project costs, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

2017-082 APPROPRIATION AND TRANSFER ORDER Water Supply Enterprise Fund Capital Improvement Plan (Majority Vote)

ORDERED:

That the sum of **\$200,000** be appropriated for the purpose of funding the Wells, Pump Stations and Treatment Plant Repair and Upgrade Program as outlined in the FY 2018 - FY 2022 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that **\$200,000** be transferred from the Water Supply Enterprise Fund Reserves, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

2017-083 APPROPRIATION AND LOAN ORDER

Water Supply Enterprise Fund Capital Improvement Plan (Two-thirds Vote)

ORDERED:

That the sum of **\$638,000** be appropriated for the purpose of funding the New Roof, Appurtenances and Site Work Construction at the Mary Dunn 1 Water Storage Tank as outlined in the FY 2018 - FY 2022 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow **\$638,000**, and that in accordance with Chapter 44, Section 20 of the General Laws, any premium received by the Town upon the sale of any bonds or notes thereunder, less any such premium applied to the payment of the costs of issuance of such bonds and notes, may be applied to pay such project costs, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

2017-084 APPROPRIATION AND TRANSFER ORDER

Water Supply Enterprise Fund Capital Improvement Plan (Majority Vote)

ORDERED:

That the sum of **\$45,000** be appropriated for the purpose of funding the Acquisition of a New Vehicle as outlined in the FY 2018 - FY 2022 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that **\$45,000** be transferred from the Water Supply Enterprise Fund Reserves, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

2017-085 APPROPRIATION AND LOAN ORDER

Golf Course Enterprise Fund Capital Improvement Plan (Two-thirds vote)

ORDERED:

That the sum of **\$325,000** be appropriated for the purpose of funding the Hyannis Golf Course Turf Maintenance and Equipment Replacement Project as outlined in the FY 2018 - FY 2022 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow **\$325,000**, and that in accordance with Chapter 44, Section 20 of the General Laws, any premium received by the Town upon the sale of any bonds or notes thereunder, less any such premium applied to the payment of the costs of issuance of such bonds and notes, may be applied to pay such project costs, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

2017-086 APPROPRIATION AND LOAN ORDER General Fund Capital Improvement Plan (Two-thirds vote)

ORDERED:

That the sum of **\$675,000** be appropriated for the purpose of funding the Osterville Recreation Building Design & Construction Project as outlined in the FY 2018 - FY 2022 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow **\$675,000**, and that in accordance with Chapter 44, Section 20 of the General Laws, any premium received by the Town upon the sale of any bonds or notes thereunder, less any such premium applied to the payment of the costs of issuance of such bonds and notes, may be applied to pay such project costs, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

2017-087 APPROPRIATION AND TRANSFER ORDER General Fund Capital Improvement Plan (Two-thirds Vote)

ORDERED:

That the sum of **\$209,000** be appropriated for the purpose of funding the Barnstable Senior Center Standby Generator Project as outlined in the FY 2018 - FY 2022 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that **\$154,000** be transferred from available funds within the Capital Trust Fund and that **\$55,000** be transferred from the available funds remaining under Town Council Order 2014-101, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

2017-088 APPROPRIATION AND TRANSFER ORDER

General Fund Capital Improvement Plan (Two-thirds Vote)

ORDERED:

That the sum of **\$158,000** be appropriated for the purpose of funding the Barnstable Police Department Dispatch Center Renovations Project as outlined in the FY 2018 - FY 2022 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that **\$158,000** be transferred from available funds within the Capital Trust Fund, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

2017-089 APPROPRIATION AND TRANSFER ORDER General Fund Capital Improvement Plan (Two-thirds Vote)

ORDERED:

That the sum of **\$82,000** be appropriated for the purpose of funding the Hydrilla Control Project as outlined in the FY 2018 - FY 2022 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that **\$82,000** be transferred from available funds within the Capital Trust Fund, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

2017-090 APPROPRIATION AND LOAN ORDER

Airport Enterprise Fund Capital Improvement Plan (Two-thirds Vote)

ORDERED:

That the sum of **\$345,000** be appropriated for the purpose of funding the Obstruction Mitigation Plan and Airspace Analysis Project as outlined in the FY 2018 - FY 2022 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow **\$345,000**, and that in accordance with Chapter 44, Section 20 of the General Laws, any premium received by the Town upon the sale of any bonds or notes thereunder, less any such premium applied to the payment of the costs of issuance of such bonds and notes, may be applied to pay such project costs, and that the Barnstable Airport Commission is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

2017-091 APPROPRIATION AND LOAN ORDER

Airport Enterprise Fund Capital Improvement Plan (Two-thirds Vote)

ORDERED:

That the sum of **\$700,000** be appropriated for the purpose of funding the Comprehensive FAA Airport Layout Plan/FAA Master Plan Update Project as outlined in the FY 2018 - FY 2022 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow **\$700,000**, and that in accordance with Chapter 44, Section 20 of the General Laws, any premium received by the Town upon the sale of any bonds or notes thereunder, less any such premium applied to the payment of the costs of issuance of such bonds and notes, may be applied to pay such project costs, and that the Barnstable Airport Commission is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

2017-092 APPROPRIATION AND LOAN ORDER Airport Enterprise Fund Capital Improvement Plan (Two-thirds Vote)

ORDERED:

That the sum of **\$745,000** be appropriated for the purpose of funding the Airport Access Control and Security Improvements Project as outlined in the FY 2018 - FY 2022 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow **\$745,000**, and that in accordance with Chapter 44, Section 20 of the General Laws, any premium received by the Town upon the sale of any bonds or notes thereunder, less any such premium applied to the payment of the costs of issuance of such bonds and notes, may be applied to pay such project costs, and that the Barnstable Airport Commission is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

2017-093 APPROPRIATION AND LOAN ORDER Airport Enterprise Fund Capital Improvement Plan (Two-thirds Vote)

ORDERED:

That the sum of **\$300,000** be appropriated for the purpose of funding the Clear Vegetation and Obstruction Removal Project as outlined in the FY 2018 - FY 2022 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow **\$300,000**, and that in accordance with Chapter 44, Section 20 of the General Laws, any premium received by the Town upon the sale of any bonds or notes thereunder, less any such premium applied to the payment of the costs of issuance of such bonds and notes, may be applied to pay such project costs, and that the Barnstable Airport Commission is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

2017-094 APPROPRIATION AND TRANSFER ORDER

Airport Enterprise Fund Capital Improvement Plan (Majority Vote)

ORDERED:

That the sum of **\$150,000** be appropriated for the purpose of funding the Runway and Taxiway Markings Painting Project as outlined in the FY 2018 - FY 2022 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that **\$150,000** be transferred from the Airport Enterprise Fund reserves, and that the Barnstable Airport Commission is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

2017-095 APPROPRIATION AND TRANSFER ORDER General Fund Capital Improvement Plan (Two-thirds Vote)

ORDERED:

That the sum of **\$105,000** be appropriated for the purpose of funding the Tyler Content Manager Software Solution Project as outlined in the FY 2018 - FY 2022 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that **\$105,000** be transferred from available funds within the Capital Trust Fund, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes and be authorized to accept any grants or gifts in relation thereto.

APPENDIX B - DEBT AMORTIZATION SCHEDULES AS OF JUNE 30, 2016

Purpose	Debt	Levy	Issue	Maturity	Original	Payments	Payments	Payments							
GENERAL FUND INTEREST & PRINCIPAL	Limit	<u> </u>		Date	Amount	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY2025	FY2026	FY2027
CTF Land Acquisition (I) - Hyannis Golf Course \$748,000 Refunded	1	1	02/15/07	02/15/17	403,000	-	-	-		-	-			-	-
CTF Land Acquisition (I) - Hyannis Golf Course \$748,000 Refunded	i	L i		02/15/26	325,200	52,065	49,310	47,600	46,080	44,560	43,040	35,520	34,240	32,960	-
CTF Land Acquisition - CAP \$365,200 Refunded	i	L i		06/30/23	115,000	4,600	28,600	27,640	26,680	23,720	21.840			-	-
CTF Land Acquisition - CAP	i	L i		06/15/23	365,200	25,140	-					-	_	_	-
CTF Advance Refund 6/15/2002 Land Acquisitions BUTAPS	i	L i		06/15/20	1,102,000	145,600	140,400	135,200	-	-	-	-	-	-	-
Total Land Acquisition	. ·	<u> </u>	00/11/11	00,10,20	1,101,000	227,405	218,310	210,440	72,760	68,280	64,880	35,520	34,240	32,960	-
						227)100	210,010	210)0	12,100	00)200	0 1,000	00)010	0 1/2 10	01,500	
High School Construction - Refunded	0	0	02/15/07	02/15/19	27,486,190	3,434,250	3,433,500	-	-	-	-	-	-	-	-
Barnstable Middle School - Refunded 2	0	0	02/15/07	02/15/20	1,548,520	165,300	158,050	150,800	-	-	-	-	-	-	-
Barnstable Middle School - Refunded 1	0	0	02/15/07	02/15/20	7,071,300	757,660	719,200	681,200	-	-	-	-	-	-	-
CTF School Upgrades 1 (I) \$360,000 Refunded	I	I	02/17/15	02/15/22	104,700	28,127	27,360	21,280	20,520	19,760	-	-	-	-	-
CTF School Facilities Repair & Improvement (I) \$660,000 Refunded	I	I	02/17/15	02/15/22	199,700	51,390	49,455	42,520	41,000	38,480	-	-	-	-	-
CTF School Health & Safety Improvements \$478,000 Refunded	1	1		02/15/26	193,400	31,780	30,700	29,620	28,660	27,700	21,740	19,980	19,260	18,540	-
CTF MME Roof Replacement (I) \$750,000 Refunded	1	1	02/17/15		329,800	52,056	49,510	47,800	46,280	44,760	43,240	40,720	34,240	32,960	-
CTF School Upgrades 2 (I) \$150,000 Refunded	1	1	02/17/15		47,400	6,766	6,645	6,420	6,220	6,020	5,820	5,620	4,920	4,240	4,120
CTF BHMCS Roof (I) \$910,000 Refunded	i	1 i	02/17/15		426,900	60,581	57,705	55,770	54,050	52,330	50,610	48,890	46,170	44,490	42,230
CTF School Facility Improvements 1 (I) \$916,600 Refunded	i	i	06/21/16		295,700	9,428	39,428	36,928	34,080	36,000	34,800	33,600	32,400	31,800	31,200
CTF School Facility Improvements 1 (I)	i	1	06/26/08		916,600	31,425	-	-	-	-	-	-	-	-	-
CTF School Building Improvements	i	1		06/15/30	936,000	65,869	64,744	62,494	61,144	59,794	58,331	56,869	55,294	53,719	52,088
CTF School Facilities Upgrades/Repairs V (I)	I	1			884,000	68,719	66,919	65,119	63,319	61,519	59,719	57,919	56,400	54,825	53,138
CTF School Parking Lot (I)	i	L i			250,000	29,000	28,000	27,000	26,000	-	-	-	-	-	-
CTF School Facilities Upgrades/Repairs IV	- i	1		06/15/21	332,000	34,800	33,600	32,400	31,200	-	-	-	-	-	-
CTF School Remolding - Asbestos 00-110 Refunded	I	1	06/14/11		50,000	6,000	5,800	5,600	5,400	5,200	-	-	-	-	
CTF School Facilities Upgrades/Repairs II	i	1		06/15/26	179,000	13,463	13,063	12,663	12,263	11,863	11.463	11,063	10,725	10.375	-
CTF School Facilities Upgrades/Repairs III	i	1 i		06/15/26	190,000	18,863	18,263	12,663	12,263	11,863	11,463	11,063	10,725	10,375	-
CTF School Improvement (I)	i	1		06/15/26	487,000	45,588	39,188	37,988	36,788	35,588	34,388	33,188	32,175	31,125	-
HS Addition & Renovation Advance Refund 6/15/2003	0	o	04/18/12		58,100	10,443	8,222	-	-	-	-	-	-	-	-
CTF Advance Refund 6/15/2003 School Remodel II	ī	ī		09/15/22	193,400	23,480	22,780	22,180	21,580	17,940	15,300	-	-	-	-
CTF Advance Refund 6/15/2003 School Remodel I	i	1	04/18/12		242,700	30,299	29,389	28,609	22,806	21,192	20,196	-	-	-	-
CTF School Roof Repairs	I	1			600,000	70,200	69,000	67,500	65,700	63,900	62,250	60,750	-	-	-
CTF HS Library AC Units	i	1	11/22/13		450,000	52,650	51,750	50,625	49,275	47,925	46,688	45,563	-	-	-
CTF School Fire & Communications System	i	L i	11/22/13	11/15/23	200,000	23,400	23,000	22,500	21,900	21,300	20,750	20,250	-	-	-
CTF School Computer Network Infrastructure	i	L i	11/22/13	11/15/23	189,000	23,000	22,600	22,100	21,500	15,975	15,563	15,188	_	_	-
CTF Intermediate School Roof & Façade Design	i	L i	11/22/13	11/15/18	100,000	20,600	20,200			-	-		_	_	-
CTF School Hot Water Pump Replacement	i	L i	11/22/13	11/15/18	85,000	15,450	15,150	-	-	-	-	-	-	-	-
CTF School Gym Bleacher Upgrades	i	L i	11/22/13	11/15/18	55,000	10,300	10,100	-	-	_	-	-	_	_	-
CTF School Grounds Maintenance Equipment	i	i	1 1 -	11/15/18	150,000	30,900	30,300	-	-	-	-	-	-	-	-
CTF School Kitchen equipment	- i	1	11/22/13		110,000	20,600	20,200	-	-	-	-	-	-	-	-
CTF Early Learning Center Modular Facility	i	ti		02/15/35	2,000,000	162,125	157,625	153,125	149,125	145,125	141,125	137,125	133,125	129,125	126,125
CTF Elementary School Modular Classroom (#2015-115)	i	1 i	02/25/16		3,720,000	308,306	300,706	293,106	280,506	273,106	265,706	258,306	250,906	243,506	236,106
CTF BIS Facade & Roof Improvements (#2015-116)	i	L i		06/30/36	3,353,000	276,781	269,981	263,181	256,381	249,581	242,781	235,981	229,181	222,381	210,581
CTF BCHMCPS Facade & Roof Improvements (#2015-117)	i	Ιİ		06/30/26	260,000	39,200	33,000	32,000	31,000	30,000	29,000	28,000	27,000	26,000	,,
CTF High School & Middle School Boiler Upgrades (#2015-119)	i	i	02/25/16		350,000	47,600	46,200	44,800	43,400	42,000	40,600	39,200	37,800	36,400	-
CTF W Village Elementary A/C Replacement (#2015-120)	i	i	02/25/16		250,000	34,000	33,000	32,000	31,000	30,000	29,000	28,000	27,000	26,000	-
Total Schools		· ·	, 10, 10	,,		6,110,396	6,004,331	2,359,989	1,473,358	1,368,920	1,260,531	1,187,273	1,007,321	975,861	755,588
						0,110,000	0,004,001	_,,	2, 3,330	1,000,020	_,_00,001	_,,,_	1,007,321	37 3,001	
CTF Private Road Repairs \$1,607,900	I	1	06/21/16	06/30/23	509,000	20,360	125,360	120,160	112,000	108,000	104,000	-	-	-	-
CTF Private Road Repairs	i	t i	06/26/08		1,607,900	112,083	-		-	-	-	-	-	-	-
CTF Bridge Repair	i	L i		06/15/21	250,000	29,000	28,000	27,000	26,000	_	-	-	-	_	
CTF Sidewalk Improvements	i	L i		06/15/21	350,000	40,600	39,200	37,800	36,400	-	-		-		-
CTF Baxter Neck Road's - Private Way	i	l i	06/14/11		350,000	32,725	33,200	30,725	29,725	23,725	22,925	22,125	21,450	20,750	
CTF Advance Refund 6/15/2003 Main St. Hyannis Infr. Improv.	i			09/15/20	39,100	5,523	5,348	5,198	4,162		-		- 21,430	- 20,730	-
CTF Advance Refund 6/15/2003 Drainage 1 (i)	i	+÷		09/15/22	193,200	23,528	22,828	22,228	21,628	18,968	15,504			-	
en Autonee helunu 0/13/2003 Draindge 1 (i)			34/10/12	33/13/22	133,200	23,328	22,028	22,220	21,028	10,908	13,304	-	-	-	-

Purpose	Debt	Levy	Issue	Maturity	Original	Payments	Payments	Payments	Payments	Payments	Payments	Payments	Payments	Payments	Payments
GENERAL FUND INTEREST & PRINCIPAL	Limit	Limit	Date	Date	Amount	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY2025	FY2026	FY2027
CTF Private Road Repairs (I)	I	1	11/22/13	11/15/23	633,000	75,500	74,200	72,575	65,700	63,900	62,250	60,750	-	-	-
CTF Sidewalk Overlays	I	I	11/22/13	11/15/23	190,000	23,150	22,750	22,250	21,650	21,050	15,563	15,188	-	-	-
CTF Bumps River Bridge Repair	I	1	11/22/13	11/15/23	120,000	16,750	11,500	11,250	10,950	10,650	10,375	10,125	-	-	-
CTF Guardrail Replacements	I	1	11/22/13	11/15/18	60,000	10,300	10,100	-	-	-	-	-	-	-	-
CTF Sidewalk/Guardrail Improvements 1	1	1	02/17/15	02/15/20	200,000	45.200	43,400	41.600	-	-	-	-	-	-	-
CTF Sidewalk/Guardrail Improvements 2	1	1	02/17/15		85,000	16,950	16,275	15,600	-	-	-	-	-	-	-
CTF Guardrail Improvements (#2015-098)	1	1	02/25/16		170,000	26,000	25,200	24,400	18,600	18,000	17,400	16,800	16,200	15,600	-
CTF Sidewalk Improvements (#2015-098)	Ì		02/25/16		230,000	33,200	32,200	31,200	30,200	29,200	23,200	22,400	21,600	20.800	-
CTF Road Repairs (#2015-102)	i	l i	02/25/16		518,000	51,719	50,319	48,919	47,519	46,119	44,719	43,319	41.919	40.519	39.119
CTF Road Repairs - Governors Way (#2016-037)	i	1	02/25/16		304,000	29,725	28,925	28,125	27,325	26,525	25,725	24,925	24.125	23,325	22,525
Total Public Ways			02/20/20	00/00/01	551,000	592.312	567,330	539.030	451,858	366,137	341.660	215,631	125,294	120,994	61,644
lotar Fubic Ways						552,512	507,550	335,030	431,838	500,157	541,000	215,051	123,234	120,554	01,044
CTF Police Station Construction (I) \$400,000 Adv Refunded 6-15-05	I	1	02/17/15	02/15/25	181,650	23,783	23,130	22,320	21,600	20,880	20,160	19,440	18,720	-	
CTF Building - Senior Center - Refunded	H	H	02/17/13		702,378	79,790	26,250	22,320	- 21,000	20,880	20,100	19,440	18,720	-	-
		+			702,378	,	,	15 680	- 15,120	- 14,560	-		-		
CTF Beach Facilities Improvements (I) \$270,000 Refunded		H	02/15/15		71,300	17,985	16,310 25,555	15,680		,					- 19,570
CTF Senior Center - Garden Level \$457,000 Refunded		⊢÷-				31,635	,	24,700	23,940	23,180	22,420	21,660	20,900	20,140	
CTF Town Building Repairs & Renovations \$685,000 Refunded		⊢÷-	02/17/15		317,600	46,470	44,940	43,410	41,050	39,730	38,410	37,090	30,770	29,650	27,810
CTF Bismore Park Visitor Center - CAP \$150,000			06/21/16		48,000	1,920	11,920	11,520	11,120	8,720	10,400	-	-	-	-
CTF Bismore Park Visitor Center - CAP	1	1	06/26/08		150,000	10,475	-	-	-	-	-	-	-		-
CTF Bismore Park Visitor Center \$465,000 Refunded	1		06/21/16		147,500	5,900	35,900	34,200	33,520	32,320	29,120	-	-	-	-
CTF Bismore Park Visitor Center	1		06/26/08		465,000	32,473	-	-	-	-	-	•	-	-	-
CTF Municipal Building Improvements \$297,000 Refunded	I	1	06/21/16		49,300	1,572	6,572	5,672	6,200	6,000	5,800	5,600	5,400	5,300	5,200
CTF Municipal Building Improvements	I	1	06/26/08		297,000	5,238	-	-	-	-	-	-	-	-	-
CTF Municipal Facility Improvements	I		06/16/10		402,500	7,119	6,994	6,744	6,594	6,444	6,281	6,119	5,944	5,769	5,588
CTF Police Facility	I		06/16/10		508,000	36,594	35,969	34,719	33,969	33,219	32,406	31,594	30,719	29,844	28,938
CTF Building - Town Hall Space - 00-110 Refunded	I		06/14/11		180,000	23,080	21,280	20,520	19,760	-	-	-	-	-	-
CTF Municipal Facility Improvement	1	1	06/14/11		300,000	34,800	33,600	32,400	31,200	-	-	-	-	-	-
CTF Building - Town Hall Repairs - 01-087 Refunded	I	1	06/14/11		100,000	11,960	11,560	11,160	10,760	9,360	-	-	-	-	-
CTF Advance Refund 6/15/2003 Building Improvements	I	1	04/18/12		96,600	11,764	11,414	11,114	10,814	10,464	6,732	-	-	-	-
CTF Advance Refund 6/15/2003 Police Facility Addition	I	1	04/18/12		626,900	76,557	71,229	67,500	65,700	63,600	61,200	-	-	-	-
CTF Tennis Courts	I	Т	11/22/13		500,000	58,500	57,500	56,250	54,750	53,250	51,875	50,625	-	-	-
CTF US Custom House upgrades	1	1	11/22/13		263,000	29,250	28,750	28,125	27,375	26,625	25,938	25,313	-	-	-
CTF Osterville Community Building Upgrades	1	1		11/15/23	200,000	23,400	23,000	22,500	21,900	21,300	20,750	20,250	-	-	-
CTF Police Station Upgrades	1	1	11/22/13		168,000	17,550	17,250	16,875	16,425	15,975	15,563	15,188	-	-	-
CTF Town Hall Interior Upgrades	1	1	11/22/13		150,000	17,550	17,250	16,875	16,425	15,975	15,563	15,188	-	-	-
CTF Guyer Barn Upgrades	1	1	11/22/13		148,000	17,425	17,125	16,750	16,300	15,850	15,438	10,125	-	-	-
CTF MEA Facility Upgrades	1	1	11/22/13	11/15/23	131,000	17,000	16,700	16,325	10,950	10,650	10,375	10,125	-	-	-
CTF Beach Facility Design	1	1	1 1 -	11/15/18	115,000	20,600	20,200	-	-	-	-	-	-	-	-
CTF Pearl St Building Upgrades	I	1	11/22/13	11/15/23	114,000	11,700	11,500	11,250	10,950	10,650	10,375	10,125	-	-	-
CTF S&G Facility Roof Repairs	I	Т	11/22/13		103,000	11,700	11,500	11,250	10,950	10,650	10,375	10,125	-	-	-
CTF Lombard Parking & Ballfield Design	I	Т		11/15/18	101,000	20,600	20,200	-	-	-	-	-	-	-	-
CTF West Barnstable Community Building Upgrades	Ι	Т	11/22/13	11/15/23	72,000	10,900	5,750	5,625	5,475	5,325	5,188	5,063	-	-	-
CTF Highway Operations Facility Construction	I	1	11/22/13	11/15/23	66,000	5,850	5,750	5,625	5,475	5,325	5,188	5,063	-	-	-
CTF Centerville Recreation Building	Ι	1	02/17/15	02/15/35	185,000	15,763	15,313	14,863	14,463	14,063	13,663	13,263	12,863	12,463	12,163
CTF Senior Center - Parking Lot Expansion	I	I	02/17/15	02/15/30	290,000	29,125	28,225	27,325	26,525	25,725	24,925	24,125	23,325	22,525	21,925
CTF Police Facilities	I	I	02/17/15	02/15/35	288,000	23,869	23,194	22,519	21,919	21,319	20,719	20,119	19,519	18,919	18,469
CTF Police Station Remodeling (#2015-100)	I	Т	02/25/16	06/30/36	355,000	31,444	30,644	29,844	29,044	28,244	27,444	26,644	25,844	25,044	24,244
CTF Town Hall Remodeling (#2015-101)	I	1	02/25/16	06/30/36	939,000	79,831	77,831	75,831	73,831	71,831	69,831	62,831	61,031	59,231	57,431
CTF Joshua's Pond Recretional Facility (#2015-111)	I	1	02/25/16		282,000	29,194	28,394	27,594	26,794	25,994	25,194	24,394	23,594	22,794	21,994
CTF Craigville Beach Bathhouse (#2016-031)	I	i	02/25/16		450,000	39,525	38,525	37,525	36,525	35,525	34,525	33,525	32,525	31,525	25,525
							877,222	784,609	757,422	682,752	635,855	503,590	311,153	283,203	268,855

						-	-	-			_	_			
Purpose	Debt		Issue	Maturity	Original	Payments	Payments	Payments	Payments	Payments	Payments	Payments	Payments	Payments	Payments
GENERAL FUND INTEREST & PRINCIPAL	Limit	-	Date	Date	Amount	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY2025	FY2026	FY2027
CTF Pleasant St. Dock - 1 \$350,000 Refunded	I	1		06/30/23	109,500	4,380	27,380	25,960	24,560	22,680	21,840	-	-	-	
CTF Pleasant St. Dock - 1	I			06/15/23	350,000	24,093	-	-	-	-	-	-	-	-	-
CTF Pleasant St. Dock - 2 \$350,000 Refunded	I	I	06/21/16		110,000	4,400	27,400	26,480	24,560	22,680	21,840	-	-	-	-
CTF Pleasant St. Dock - 2	I			06/15/23	350,000	24,093	-	-	-	-	-	-	-	-	-
CTF Boat Ramps - CAP \$927,000 Refunded	I		06/21/16		290,000	11,600	66,600	69,400	67,000	64,600	57,200	-	-	-	-
CTF Boat Ramps - CAP	I			06/15/23	927,000	64,945	-	-	-	-	-	-	-	-	
CTF Dredging	1	1	06/16/10		419,250	36,875	36,125	34,625	33,725	32,825	31,850	25,875	-	-	-
CTF Boat Ramp Renovations	1	1	06/14/11		250,000	29,000	28,000	27,000	26,000	-	-	-	-	-	-
CTF Dredging East Bay & Blish Point	I	1		06/15/21	665,000	75,400	72,800	70,200	67,600	-	-	-	-	-	-
CTF Prince Cove/Hayward Rd. Boat Ramp	I	1	06/14/11		600,000	53,850	52,250	50,650	49,050	47,450	45,850	44,250	42,900	41,500	-
CTF East Bay Dredging	1	1	11/22/13		600,000	70,200	69,000	67,500	65,700	63,900	62,250	60,750	-	-	-
CTF Hyannis Harbor Bulkhead Construction	I	I	11/22/13		142,000	17,150	16,850	16,475	16,025	10,650	10,375	10,125	-	-	-
CTF Millway Boat Ramp & Dock Upgrades	I	I	11/22/13		133,000	17,000	16,700	16,325	10,950	10,650	10,375	10,125	-	-	-
CTF Blish Point Sand Management	I	I	02/17/15		215,000	50,425	43,400	41,600	-	-	-	-	-	-	-
CTF Dredge Permitting/Planning	I	1	02/17/15		341,000	78,675	70,525	67,600	-	-	-	-	-	-	-
CTF Marstons Mills Fish Run Reconstruction	I	1	02/17/15		326,000	34,875	33,750	27,625	26,825	26,025	25,225	24,425	23,625	22,825	22,225
CTF Paving: Bay Stree Boat Ramp (#2015-099)	I	I	02/25/16		142,000	20,000	19,400	18,800	18,200	17,600	17,000	16,400	10,800	10,400	-
CTF Channel Dredging-Barnstable Harbor (#2016-035)	1	1	02/25/16	06/30/26	490,000	67,600	65,600	63,600	61,600	59,600	57,600	55,600	48,600	46,800	-
Total Waterways						684,560	645,780	623,840	491,795	378,660	361,405	247,550	125,925	121,525	22,225
CTF MWPAT CW-04-31 Pool 11	I	1	11/09/07	07/15/20	389,216	33,999	33,999	33,999	33,999	-	-	-	-	-	-
CTF Coastal Water Quality Improvements	0	1	06/26/08	06/15/18	250,000	25,140	-	-	-	-	-	-	-	-	-
CTF Lake & Pond Improvements	I	1	06/26/08	06/15/18	250,000	25,140	-	-	-	-	-	-	-	-	-
CTF Lake Treatment	I	1	06/16/10	06/15/25	275,000	24,575	24,075	23,075	17,475	17,025	16,538	16,050	15,525	-	-
CTF Nitrogen Management CW-04-31-A	I	1	03/15/11	07/15/20	211,460	23,330	23,330	23,330	23,330	-	-	-	-	-	-
CTF Advance Refund 6/15/2003 Drainage 2 (i)	I	1	04/18/12	09/15/22	96,700	11,768	11,418	11,118	10,818	10,468	6,834	-	-	-	-
CTF Nitrogen Management CW-04-31-B Series 16	I	I	05/14/15	07/15/20	157,531	27,842	27,882	27,922	27,963	-	-	-	-	-	-
CTF Water Quality Evaluation	I	I	11/22/13	11/15/23	230,000	28,700	28,200	27,575	21,900	21,300	20,750	20,250	-	-	-
CTF Sewer Expansion Analysis	I	I	11/22/13	11/15/18	70,000	15,350	10,100	-	-	-	-	-	-	-	-
CTF Hamblin Pond Alum Treatment (#2015-112)	I	1	02/25/16	06/30/31	300,000	29,725	28,925	28,125	27,325	26,525	25,725	24,925	24,125	23,325	22,525
Total Water Quality						245.570	187,929	175,145	162,810	75,318	69.847	61.225	39,650	23.325	22.525
						-,	- ,				,.		,		
TOTAL GENERAL FUND BOND OBL	GATIO	NS				8,830,132	8,500,902	4,693,053	3,410,003	2,940,066	2,734,177	2,250,789	1,643,583	1,557,868	1.130.836
	0/11101					0,000,101	0,000,002	1,050,050	0)110)000	2,5 10,000	2,70 1,177	2,200,700	1)010)000	1,007,000	1,100,000
Purpose	Debt	Levy	Issue	Maturity	Original	Payments	Payments	Payments	Payments	Payments	Payments	Payments	Payments	Payments	Payments
ENTERPRISE FUND INTEREST & PRINCIPAL	_	Limit	Date	Date	Amount	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY2025	FY2026	FY2027
Airport (O)	0	1		06/15/31	730,000	51,800	50,600	54,400	53,000	51,600	55,200	53,600	52,250	50,850	54,350
Total Airport Fund Bonds					,	51,800	50,600	54,400	53,000	51,600	55,200	53,600	52,250	50,850	54,350
						,	,	0 1/100	,	01,000	00,200		01,100	,	.,
Hyannis Golf Course Acquisition \$3,900,000 Refunded	1	1	02/17/15	02/15/25	1,951,500	292.200	290,660	289,760	289,600	289,080	288,200	291,960	290.160	-	
Olde Barnstable Golf Course Maintenance Equipment	i	ti	02/17/15		200,000	45,200	43,400	41,600	-	-	-	-	-	-	-
Olde Barnstable Building Improvements (#2015-105)	i	ti	02/25/16		174,000	21,400	20,800	20,200	19,600	24,000	23,200	22,400	21,600	20,800	_
Hyannis Building Improvements (#2015-106)	i	ti	02/25/16		140,000	15,200	19,800	19,200	18,600	18,000	17,400	16,800	16,200	15,600	-
Total Golf Course		· ·	, -0, 10	- 5, 00, 20	1.0,000	374,000	374,660	370,760	327,800	331,080	328,800	331,160	327,960	36,400	-
			_	_		374,000	374,000	370,700	327,000	331,080	320,000	331,100	321,300	50,400	-
Sewer 98-27, Series 5	I		08/25/04	08/01/10	329.295	29,398	28,194	26,961	_		_	_			
Sewer 98-27, Series 5				08/01/19	sz9,295 (subsidv)	(9,985)	(9.441)	(8.491)		-			-	-	-
Sewer 98-27 Sewer 98-42, Series 5			08/25/04		(subsidy) 216.429	(9,985)	(9,441)	20,550							-
Sewer 98-42, Series 5 Sewer 98-42, Series 5			08/25/04		(subsidy)	(6,779)	(1,385)	20,550	-	-	-	-	-	-	-
Sewer 98-42, Series 5 Sewer 98-44, Series 5		+		08/01/19	(subsidy) 112.262	9.936	9,530	9.113	-	-	-	-	-	-	-
•		+ -		08/01/19	(subsidy)	9,936 (3,414)	9,530	9,113 (2,908)	-	-	-	-	-	-	-
Sewer 98-44, Series 5	-	+			,				-	-		-		-	-
Sewer 98-46, Series 5	1	<u> </u>		08/01/19	1,398,265 (subsidy)	118,418	118,436 (40,301)	118,163	-		-	-	-	-	-
Sewer 98-46, Series 5		1 '	08/25/04	00/01/19	(subsidy)	(42,564)	(40,301)	(36,199)	-	-	-	-	-	-	· -

Purpose	Debt	Levy	Issue	Maturity	Original	Payments									
ENTERPRISE FUND INTEREST & PRINCIPAL	Limit		Date	Date	Amount	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY2025	FY2026	FY2027
Shallow Well Injection - CW-00-60 - Pool 8	1	1	08/25/04	08/01/22	436,370	31,771	31,305	33,983	33,040	32,250	30,750	-	-	-	-
Shallow Well Injection - CW-00-60 - Pool 8	i	+÷	08/25/04		(subsidy)	(11,852)	(11,704)	(10,636)	(10,267)	(9,974)	(9,028)		-		-
Sewer 98-44A	i	+ ÷	12/14/06		1,582,178	132,061	126,434	126,831	126,588	121,424	120,681	115,000	-	-	-
Sewer 98-44A	i	1 i		08/01/23	(subsidy)	(49,202)	(46,919)	(45,096)	(42,911)	(40,775)	(38,360)	(34,430)	-		-
Sewer 98-49A	i	1 i	12/14/06		556,458	46,257	44,287	42,747	45,863	43,989	41,976	40,000	-	-	-
Sewer 98-49A	i	1 i		08/01/23	(subsidy)	(17,277)	(16,478)	(15,872)	(15,082)	(14,307)	(13,463)	(12,096)	-	-	-
Waste Water Treament Plant Sewer Turbine Generator \$570,000 Refunded	I	1	06/21/16		251,000	8,040	33,040	31,040	31,080	30,080	26,080	33,200	27,000	26,500	26,000
Waste Water Treament Plant Sewer Turbine Generator	i	1	06/26/08		570.000	25,140	-	-	-	-		-			-
MWPAT CW-04-35	0	1	12/15/09		4,938,114	326,668	326,668	326,669	326,668	326,668	326,668	326,668	326,668	326,668	326,668
Sewer 05-28 Restructured	0	1	03/15/11		629,403	41,636	41,636	41,636	41,637	41,637	41,636	41,637	41,637	41,637	41,636
Sewer (I)	Т	1	06/14/11	06/15/21	300,000	34,800	33,600	32,400	31,200	-	-	-	-	-	-
Sewer CW-04-35A Pool 13	Т	1	06/06/12	07/15/27	1,469,137	107,318	107,307	107,295	107,284	107,272	107,259	107,247	107,234	107,221	107,207
Rehab Clarifiers (#2015-091)	0	I	02/25/16	06/30/36	1,000,000	81,813	79,813	77,813	75,813	73,813	71,813	69,813	67,813	65,813	63,813
Pump Station/Sewer Main Const (#2009-132)	I	I	02/25/16	06/30/21	318,000	75,000	72,400	64,800	62,400	-	-	-	-	-	-
Total Sewer Enterprise Fun	d					944,245	939,549	940,246	813,312	712,075	706,011	687,038	570,351	567,838	565,324
Solid Waste Landfill Closure - 98-24, Series 4	0	1	08/25/04	08/01/18	5,166,301	464,424	465,350	-	-	-	-	-	-	-	-
Solid Waste Landfill Closure - 98-24, Series 4	0	I	08/25/04	08/01/18	(subsidy)	(140,492)	(129,348)	-	-	-	-	-	-	-	-
Solid Waste Facility (I) \$630,000 Refunded	I	I	02/17/15	02/15/27	284,900	40,026	38,825	37,520	36,360	35,200	33,040	31,920	30,800	29,680	28,840
Advance Refund 6/15/2003 Transfer Station Improvements	0	1	04/18/12	09/15/22	241,500	29,410	28,535	27,785	27,035	22,240	20,910	-	-	-	-
Total Solid Waste Fund						393,367	403,362	65,305	63,395	57,440	53,950	31,920	30,800	29,680	28,840
Water Co. (Level Debt) (O) \$10,000,000 Refunded	Т	1	02/17/15	02/15/27	5,704,800	689,556	691,615	690,430	693,870	691,350	692,070	691,870	689,750	692,750	692,160
MWPAT DWS-09-02	0	I	07/08/10	07/15/30	2,788,911	169,184	169,185	169,184	169,184	169,185	169,184	169,184	169,185	169,184	169,184
DW-09-02 Series 16	0	1	05/14/15	07/15/32	533,117	35,010	35,049	35,089	35,129	35,170	35,213	35,256	35,300	35,346	35,391
DWP-11-09 Series 17A	0	1	05/14/15	01/15/33	793,438	52,486	52,552	52,620	52,689	52,759	52,831	52,904	52,980	53,057	53,135
DWP-11-10 Series 17A	0	1	05/22/13	01/15/33	560,761	34,062	34,104	34,148	34,193	34,238	34,285	34,332	34,382	34,431	34,482
Water Main Loop	1	1	02/17/15	02/15/35	540,000	46,838	45,488	44,138	42,938	41,738	40,538	39,338	38,138	36,938	36,038
MCWT Series 19 DWP-13-01	0	1	02/11/16	06/30/36	2,418,547	146,373	146,546	146,723	146,904	147,089	147,278	147,471	147,668	147,870	148,076
Water Main Replacement (#2010-097)	0	1	02/25/16	06/30/21	380,000	87,000	84,000	81,000	78,000	-	-	-	-	-	-
Pipe Replacement Upgrade FY17 (#2015-085)	0	1	02/25/16		900,000	73,631	71,831	70,031	68,231	66,431	64,631	62,831	61,031	59,231	57,431
Paint/Repair Mary Dunn 2 (#2015-087)	1	1	02/25/16	06/30/21	615,000	144,600	139,600	129,600	124,800	-	-	-	-	-	-
Total Water Enterprise Fun	d					1,478,740	1,469,970	1,452,964	1,445,938	1,237,961	1,236,030	1,233,187	1,228,433	1,228,806	1,225,897
CTF Marina Bulkhead Repair I	Т	1	06/14/11		725,000	58,831	57,231	55,631	54,031	52,431	50,831	44,231	43,050	41,825	40,513
Marina Bulkhead Repair II	Т	1	06/14/11		525,000	40,300	39,300	38,300	37,300	41,300	40,100	38,900	37,888	36,838	40,713
Advance Refund 6/14/2004 Prince Cove Marina Acquisition	1	Т	04/18/12		864,000	112,470	109,145	105,310	98,550	95,400	91,800	-	-	-	-
Gateway Marina Dredging (#2015-108)	I	1	02/25/16		280,000	40,000	38,800	37,600	36,400	35,200	29,000	28,000	27,000	26,000	-
Prince Cover Marina Bulkhead (#2015-109)	I	1	02/25/16		570,000	48,188	46,988	45,788	44,588	43,388	42,188	40,988	39,788	38,588	37,388
Hyannis Harbour Bulkhead (#2015-110)	1		02/25/16	06/30/21	158,000	34,800	33,600	32,400	31,200	-	-	-	-	-	-
Total Marina Enterprise Fur	d					334,589	325,064	315,029	302,069	267,719	253,919	152,119	147,725	143,250	118,613
Sandy Neck Beach House II	I	1	06/14/11		81,000	6,919	6,719	6,519	6,319	6,119	5,919	5,719	5,550	10,375	
Sandy Neck Beach House I	1	1	06/14/11		966,491	69,006	72,406	70,606	68,806	72,006	70,006	68,006	71,319	69,394	72,331
Sandy Neck Beach House III	1	I	06/14/11	06/15/31	217,509	16,256	15,856	15,456	15,056	14,656	14,256	13,856	13,519	13,169	12,794
Total Sandy Neck Enterprise F	und					92,181	94,981	92,581	90,181	92,781	90,181	87,581	90,388	92,938	85,125
CTF HYCC 1 (I) \$1,000,000 Refunded	Т	1	02/17/15		474,900	66,446	64,390	62,230	60,310	58,390	56,470	53,550	51,670	49,790	47,380
CTF HYCC 2 (I) \$8,000,000 Refunded	I	1	02/17/15		3,794,400	535,190	515,775	495,450	480,170	463,890	447,650	430,450	413,330	396,290	380,070
CTF HYCC 3 (I) \$1,600,000 Refunded	1	1	02/17/15		759,000	107,645	103,135	98,670	95,630	92,590	89,550	86,510	82,470	79,470	76,220
CTF HYCC 4 (I) \$6,765,000 Refunded	1		06/21/16		3,320,000	107,000	452,000	433,200	419,600	404,000	384,480	374,200	360,800	344,100	332,600
CTF HYCC 4		I	06/26/08	06/15/28	6,765,000	354,055	-	-	-	-	-	-	-	-	-
Total HYCC Enterprise Fun	1					1,170,336	1,135,300	1,089,550	1,055,710	1,018,870	978,150	944,710	908,270	869,650	836,270

Purpose	Debt	Levv	Issue	Maturity	Original	Payments	Payments	Payments	Payments	Payments	Payments	Payments	Payments	Payments	Payments
	Limit		Date	Date	Amount	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY2025	FY2026	FY2027
Land Acquisition - 2004-105 Bonehill \$200k Refunded	I	I	02/17/15	02/15/25	90,850	11,813	11,565	11,160	10,800	10,440	10,080	9,720	9,360	-	-
Land Acquisition - 06-15-05 - 2004-106 \$180k Refunded	I	Т	02/17/15	02/15/25	73,600	10,832	10,845	11,440	11,040	4,640	4,480	4,320	4,160	-	-
Land Acquisition - Hyannis Golf \$5,500,000 Refunded	Ι	Т	02/17/15	02/15/25	2,496,300	328,741	321,835	308,540	301,580	286,500	277,620	266,700	255,320	-	-
Land Acquisition - Archibald \$500,000 Refunded	I	1	02/17/15	02/15/26	212,100	32,490	31,410	30,330	29,370	28,410	26,450	25,530	24,610	23,690	-
Town Hall Renovations	Ι	I	06/16/10	06/15/30	1,332,520	95,144	93,519	90,269	88,319	86,369	84,256	82,144	79,869	77,594	75,238
Land Acquisition 1 Adv Ref 6/15/2002	Ι	I	06/14/11	06/15/22	7,065,000	856,160	817,960	684,120	624,480	526,240	-	-	-	•	-
Advance Refund 6/15/2003 Land Acquisitions	_	1	04/18/12	09/15/22	964,600	113,034	109,709	106,859	104,009	100,684	96,492	-	-	-	-
Advance Refund 6/15/2004 Landbank Acquisitions3	Ι	I	04/18/12	09/15/22	5,385,600	713,224	682,234	650,624	623,374	597,544	567,732	-	-		-
Advance Refund 6/15/2004 Landbank Acquisitions 2	-	I	04/18/12	09/15/22	227,300	29,750	28,875	28,125	27,375	26,500	25,500	-	-	-	-
Total Community Preservation	Fund					2,191,188	2,107,952	1,921,467	1,820,347	1,667,327	1,092,610	388,414	373,319	101,284	75,238
Title V - Phase I - 97-1131 Series 6-	0	1	07/25/02	08/01/20	197,403	12,359	11,774	11,209	10,468	-	-	-	-	-	-
Title V - Phase I - 97-1131 Series 6	0	1	07/01/04	08/01/22	190,580	12,737	12,239	11,741	11,242	10,969	10,459	-	-		-
Title V - Phase III - Pool 11 T5-97-1131-2	0	1	10/31/05	07/15/25	200,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	-
Title V - Phase IV - Pool 11 T5-97-1131-3	0	1	10/31/05	07/15/25	200,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	-
Title V - Phase V - Pool 12 97-1131-4D	0	1	12/14/06	07/15/26	200,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Total Title V						55,096	54,013	52,950	51,710	40,969	40,459	30,000	30,000	30,000	10,000
MWPAT CWS-09-07	I	1	07/08/10	07/15/30	3,285,646	199,318	199,318	199,318	199,318	199,318	199,318	199,318	199,318	199,318	199,318
Sewer CWS-09-07-A Series 16	I	1	05/14/15	07/15/32	4,592,367	301,583	301,917	302,260	302,608	302,965	303,329	303,701	304,082	304,471	304,868
Total Sewer Construction Trust	Fund					500,902	501,235	501,578	501,926	502,283	502,647	503,019	503,400	503,788	504,185
	_														
TOTAL ENTERPRISE FUND BOND OBLI	GATIO	NS				7,586,443	7,456,686	6,856,829	6,525,388	5,980,104	5,337,957	4,442,748	4,262,894	3,654,484	3,503,842
	_								_					_	
GRAND TOTAL TOWN OF BARNSTABLE BON	D OBLI	GATIO	NS			16,416,575	15,957,588	11,549,882	9,935,391	8,920,170	8,072,135	6,693,537	5,906,477	5,212,352	4,634,678

Purpose	Debt	Levy	Issue	Maturity	Original	Payments	Balance								
GENERAL FUND INTEREST & PRINCIPAL	Limit	Limit	Date	Date	Amount	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033	FY2034	FY2035	FY2036	
CTF Land Acquisition (I) - Hyannis Golf Course \$748,000 Refunded	1	Т	02/15/07	02/15/17	403,000	-	-	-	-	-	-	-	-	-	41,600
CTF Land Acquisition (I) - Hyannis Golf Course \$748,000 Refunded	Ι	-	02/17/15	02/15/26	325,200	-	-	-	-	-	-	-	-	-	398,440
CTF Land Acquisition - CAP \$365,200 Refunded	I	-	06/21/16	06/30/23	115,000	-	-	•	-	-	-	-	-	-	137,603
CTF Land Acquisition - CAP	I	Ι	06/26/08	06/15/23	365,200	-	-	•	-	-	-	-	-	-	51,180
CTF Advance Refund 6/15/2002 Land Acquisitions BUTAPS	1	I	06/14/11	06/15/20	1,102,000	-	-		-	-	-	-	-	-	575,850
Total Land Acquisition						-	-	-	-	-	-	-	-	-	1,204,673
High School Construction - Refunded	0	0	02/15/07	02/15/19	27,486,190	-	-	-	-	-	-	-	-	-	10,301,800
Barnstable Middle School - Refunded 2	0	0	02/15/07	02/15/20	1,548,520	-	-	-	-	-	-	-	-	-	650,450
Barnstable Middle School - Refunded 1	0	0	02/15/07	02/15/20	7,071,300	-	-	-	-	-	-	-	-	-	2,957,720
CTF School Upgrades 1 (I) \$360,000 Refunded	Ι	-	02/17/15	02/15/22	104,700	-	-	-	-	-	-	-	-	-	121,473
CTF School Facilities Repair & Improvement (I) \$660,000 Refunded	I	-	02/17/15	02/15/22	199,700	-	-	•	-	-	-	-	-	-	231,235
CTF School Health & Safety Improvements \$478,000 Refunded	I	-	02/17/15	02/15/26	193,400	-	-	-	-	-	-	-	-	-	235,760
CTF MME Roof Replacement (I) \$750,000 Refunded	I	-	02/17/15	02/15/26	329,800	-	-	•	-	-	-	-	-	-	404,822
CTF School Upgrades 2 (I) \$150,000 Refunded	I	Ι	02/17/15	02/15/27	47,400	-	-	•	-	-	-	-	-	-	58,656
CTF BHMCS Roof (I) \$910,000 Refunded	1	- 1	02/17/15	02/15/27	426,900	-	-	-	-	-	-	-	-	-	529,506
CTF School Facility Improvements 1 (I) \$916,600 Refunded	1	1	06/21/16	06/30/28	295,700	30,600	-	-	-	-	-	-	-	-	359,535
CTF School Facility Improvements 1 (I)	1	1	06/26/08	06/15/28	916,600	-	-	-	-	-	-	-	-	-	63,975
CTF School Building Improvements	1	1	06/16/10	06/15/30	936,000	50,288	48,600	46,800	-	-	-	-	-	-	809,400
CTF School Facilities Upgrades/Repairs V (I)	1	1	06/14/11	06/15/31	884,000	46,450	44,850	43,250	41,650	-	-	-	-	-	853,863
CTF School Parking Lot (I)	1	1	06/14/11	06/15/21	250,000	-	-	-	-	-	-	-	-	-	139,750
CTF School Facilities Upgrades/Repairs IV	1	1	06/14/11	06/15/21	332,000	-	-	-	-	-	-	-	-	-	172,850
CTF School Remolding - Asbestos 00-110 Refunded	1	- 1	06/14/11	06/15/22	50,000	-	-	-	-	-	-	-	-	-	34,150
CTF School Facilities Upgrades/Repairs II	I	I	06/14/11	06/15/26	179,000	-	-	-	-	-	-	-	-	-	120,700
CTF School Facilities Upgrades/Repairs III	I	- 1	06/14/11	06/15/26	190,000	-	-	-	-	•	-	-	-	-	136,850
CTF School Improvement (I)	I	I	06/14/11	06/15/26	487,000	-	-	-	-	-	-	-	-	-	372,650

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Purpose	Debt			Maturity	Original	Payments		Payments	Balance						
GENERAL FUND INTEREST & PRINCIPAL	Limit			Date	Amount	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033	FY2034	FY2035	FY2036	
HS Addition & Renovation Advance Refund 6/15/2003	0	0			58,100	-	-	-		-	-	-	-	-	29,508
CTF Advance Refund 6/15/2003 School Remodel II	1		04/18/12		193,400	-	-	-	-	-	-	-	-	-	147,540
CTF Advance Refund 6/15/2003 School Remodel I	1	1	04/18/12		242,700	-	-	-	-	-	-	-	-	-	183,830
CTF School Roof Repairs	1	1	11/22/13		600,000	-		-	-	-		-	-	-	531,000
CTF HS Library AC Units	1	1	11/22/13		450,000	-	-	-	-	-	-	-	-	-	398,250
CTF School Fire & Communications System	I		11/22/13		200,000	-	-	-	-	-	•	-	-	-	177,000
CTF School Computer Network Infrastructure	Т	I	11/22/13		189,000	-	-	-	-	-	-	-	-	-	159,425
CTF Intermediate School Roof & Façade Design	I	I	1 1 2	11/15/18	100,000	-	-	-	-	-	-	-	-	-	61,900
CTF School Hot Water Pump Replacement	1	1	11/22/13		85,000	-	-	-	-	-	-	-	-	-	46,425
CTF School Gym Bleacher Upgrades	I	I	11/22/13		55,000	-	-	-	-	-	-	-	-	-	30,950
CTF School Grounds Maintenance Equipment	I	I		11/15/18	150,000	-	-	-	-	-	-	-	-	-	92,850
CTF School Kitchen equipment	I	I		11/15/18	110,000	-	-	-	-	-	-	-	-	-	61,900
CTF Early Learning Center Modular Facility	I	1	02/17/15		2,000,000	123,125	120,625	118,000	115,000	112,000	109,000	106,000	103,000	-	2,504,625
CTF Elementary School Modular Classroom (#2015-115)	1	I	02/25/16		3,720,000	232,406	227,781	223,850	218,300	212,750	207,200	201,650	196,100	190,550	4,933,259
CTF BIS Façade & Roof Improvements (#2015-116)	1	I	02/25/16		3,353,000	207,281	203,156	199,650	194,700	189,750	184,800	179,850	174,900	169,950	4,444,393
CTF BCHMCPS Façade & Roof Improvements (#2015-117)	1	1	02/25/16	06/30/26	260,000	-	-	-	-	-	-	-	-	-	315,311
CTF High School & Middle School Boiler Upgrades (#2015-119)	1	1	02/25/16	06/30/26	350,000	-	-	-	-	-	-	-	-	-	426,611
CTF W Village Elementary A/C Replacement (#2015-120)	1	1	02/25/16	06/30/26	250,000	-	-	-	-	-	-	-	-	-	304,722
Total Schools						690,150	645,013	631,550	569,650	514,500	501,000	487,500	474,000	360,500	33,685,443
CTF Private Road Repairs \$1,607,900	1	I	06/21/16	06/30/23	509,000	-	-	-	-	-	-	-	-	-	609,901
CTF Private Road Repairs	1	I	06/26/08	06/15/23	1,607,900	-	-	-	-	-	-	-	-	-	228,178
CTF Bridge Repair	1	I	06/14/11	06/15/21	250,000	-	-	-	-	-	-	-	-	-	139,750
CTF Sidewalk Improvements	1	I	06/14/11	06/15/21	350,000	-	-	-	-	-	-	-	-	-	195,650
CTF Baxter Neck Road's - Private Way	1	I	06/14/11	06/15/26	350,000	-	-	-	-	-	-	-	-	-	269,350
CTF Advance Refund 6/15/2003 Main St. Hyannis Infr. Improv.	1	1	04/18/12		39,100	-	-	-	-	-	-	-	-	-	25,954
CTF Advance Refund 6/15/2003 Drainage 1 (i)	1	1	04/18/12		193,200	-	-	-	-	-	-	-	-	-	149,012
CTF Private Road Repairs (I)	1	1	11/22/13	11/15/23	633,000	-	-	-	-	-	-	-	-	-	552,000
CTF Sidewalk Overlays	1	I	11/22/13		190,000	-	-	-	-	-	-	-	-	-	165,250
CTF Bumps River Bridge Repair	i	i	11/22/13		120,000	-	-	-	-	-	-	-	-	-	98,725
CTF Guardrail Replacements	i	i		11/15/18	60,000	-	-	-	-	-	-	-	-	-	30,950
CTF Sidewalk/Guardrail Improvements 1	i	i	02/17/15		200,000	-	-	-	-	-	-	-	-	-	176,200
CTF Sidewalk/Guardrail Improvements 2	1	i	02/17/15		85,000	-	-	-	-	-	-	-	-	-	71.175
CTF Guardrail Improvements (#2015-098)	i	i	02/25/16		170,000	-	-	-	-	-	-	-	-	-	204,811
CTF Sidewalk Improvements (#2015-098)	i	i	02/25/16		230.000	-				-				-	277.944
CTF Road Repairs (#2015-102)	i	i	02/25/16		518,000	38,419	37,544	31,800	30.900	-		-	-	-	648,582
CTF Road Repairs - Governors Way (#2016-037)	i	÷	02/25/16		304,000	22.125	21,625	21,200	20,600	-	-	-	-	-	381,188
Total Public Ways			02/23/10	00/30/31	304,000	60,544	59,169	53,000	51,500	-	-	_	_	-	4,224,620
						00,544	55,105	53,000	51,500	-		-	-	-	4,224,020
CTF Police Station Construction (I) \$400,000 Adv Refunded 6-15-05	1		02/17/15	02/15/25	181,650	-		-				_	-	-	195,347
CTF Building - Senior Center - Refunded			02/17/15		702,378	-	-	-	-	-		-	-	-	195,347
CTF Beach Facilities Improvements (I) \$270,000 Refunded		+	02/15/07		702,378	-		-		-		-	-	-	82,640
CTF Senior Center - Garden Level \$457.000 Refunded			02/15/15		195.000	-	-	-	-	-	-	-	-	-	82,640 241,335
						-	-	-	-	-		-	-		,
CTF Town Building Repairs & Renovations \$685,000 Refunded		+	02/17/15		317,600				-	-	-		-	-	391,800
CTF Bismore Park Visitor Center - CAP \$150,000	<u> </u>	<u> </u>	06/21/16		48,000										57,488
CTF Bismore Park Visitor Center - CAP	1	<u> </u>	06/26/08		150,000	-	-	-	-	-	-	-	-	-	21,325
CTF Bismore Park Visitor Center \$465,000 Refunded	1	<u> </u>	06/21/16		147,500	-	-	-	-	-	-	-	-	-	176,762
CTF Bismore Park Visitor Center	1	1	06/26/08		465,000	-	-	-	-	-	-	-	-	-	66,108
CTF Municipal Building Improvements \$297,000 Refunded	1		06/21/16		49,300	5,100	-	-	-	-	-	-	-	-	59,962
CTF Municipal Building Improvements	1		06/26/08		297,000	-	-	-	-	-	-	-	-	-	10,663
CTF Municipal Facility Improvements	I	1	06/16/10		402,500	5,388	5,200	-	-	-	-	-	-	-	81,550
CTF Police Facility	Т	I	06/16/10		508,000	27,938	27,000	26,000	-	-	-	-	-	-	446,750
CTF Building - Town Hall Space - 00-110 Refunded	1	1	06/14/11	06/15/21	180,000	-	-	-	-	-	-	-	-	-	108,320

Purpose	Debt	Levy	Issue	Maturity	Original	Payments	Payments	Payments	Payments	Payments	Payments	Payments	Payments	Payments	Balance
GENERAL FUND INTEREST & PRINCIPAL	Limit	Limit	Date	Date	Amount	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033	FY2034	FY2035	FY2036	Dalalice
CTF Municipal Facility Improvement	I	LIMIL		06/15/21	300,000	-	-	-	-		F12055	-	-	-	167,700
			06/14/11	06/15/22				-	-	-	-	-	-	-	
CTF Building - Town Hall Repairs - 01-087 Refunded		-			100,000		-	-	-		-	-			67,060
CTF Advance Refund 6/15/2003 Building Improvements	1	1			96,600	-	-	-	-	-	-	-	-	-	74,466
CTF Advance Refund 6/15/2003 Police Facility Addition	1			09/15/22	626,900	-	-	-	-	-	-	-	-	-	484,943
CTF Tennis Courts	I			11/15/23	500,000	-	-	-	-	-	-	-	-	-	442,500
CTF US Custom House upgrades	1			11/15/23	263,000	-	-	-	-	-	-	-	-	-	221,250
CTF Osterville Community Building Upgrades	1		11/22/13		200,000	-	-	-	-	-	-	-	-	-	177,000
CTF Police Station Upgrades	I	I			168,000	-	-	-	-	-	-	-	-	-	137,825
CTF Town Hall Interior Upgrades	I	I		11/15/23	150,000	-	-	-	-	-	-	-	-	-	132,750
CTF Guyer Barn Upgrades	I	1		11/15/23	148,000	-	-	-	-	-	-	-	-	-	126,813
CTF MEA Facility Upgrades	I	I	11/22/13		131,000	-	-	-	-	-	-	-	-	-	109,500
CTF Beach Facility Design	I	1		11/15/18	115,000	-	-	-	-	-	-	-	-	-	66,975
CTF Pearl St Building Upgrades	I	1		11/15/23	114,000	-	-	-	-	-	-	-	-	-	88,500
CTF S&G Facility Roof Repairs	1	I	11/22/13		103,000	-	-	-	-	-	-	-	-	-	88,500
CTF Lombard Parking & Ballfield Design	I	I		11/15/18	101,000	-	-	-	-	-	-	-	-	-	61,900
CTF West Barnstable Community Building Upgrades	I	I	1 1 -	11/15/23	72,000	-	-	-	-	-	-	-	-	-	54,475
CTF Highway Operations Facility Construction	I	I		11/15/23	66,000	-	-	-	-	-	-	-	-	-	49,325
CTF Centerville Recreation Building	1	I.	02/17/15	02/15/35	185,000	11,863	11,613	11,350	11,050	10,750	5,450	5,300	5,150	-	227,363
CTF Senior Center - Parking Lot Expansion	I	I		02/15/30	290,000	21,325	20,825	10,300	-	-	-	-	-	-	335,725
CTF Police Facilities	1	1	02/17/15	02/15/35	288,000	18,019	17,644	17,250	16,800	16,350	10,900	10,600	10,300	-	352,594
CTF Police Station Remodeling (#2015-100)	I	-	02/25/16	06/30/36	355,000	18,844	18,469	18,150	17,700	17,250	16,800	16,350	15,900	15,450	465,254
CTF Town Hall Remodeling (#2015-101)	I	I	02/25/16	06/30/36	939,000	56,531	55,406	54,450	53,100	51,750	50,400	49,050	47,700	46,350	1,239,353
CTF Joshua's Pond Recretional Facility (#2015-111)	I	I	02/25/16	06/30/31	282,000	16,594	16,219	15,900	15,450	-	-	-	-	-	351,894
CTF Craigville Beach Bathhouse (#2016-031)	I	I	02/25/16	06/30/36	450,000	25,125	24,625	24,200	23,600	23,000	22,400	21,800	21,200	20,600	591,894
Total Public Facilities						206,725	197,000	177,600	137,700	119,100	105,950	103,100	100,250	82,400	8,348,635
CTF Pleasant St. Dock - 1 \$350,000 Refunded	I	I	06/21/16	06/30/23	109,500	-	-	-	-	-	-	-	-	-	131,107
CTF Pleasant St. Dock - 1	I	I	06/26/08	06/15/23	350,000	-	-	-	-	-	-	-	-	-	49,048
CTF Pleasant St. Dock - 2 \$350,000 Refunded	I	I	06/21/16	06/30/23	110,000	-	-	-	-	-	-	-	-	-	131,687
CTF Pleasant St. Dock - 2	1	1	00/20/00	06/15/23	350,000	-			-	-					
			06/26/08			-	-	-	-	-	-	-	-	-	49,048
CTF Boat Ramps - CAP \$927,000 Refunded		· ·		06/30/23	290,000	-	-	-	-	-	-	-	-	-	49,048 347,807
CTF Boat Ramps - CAP \$927,000 Refunded CTF Boat Ramps - CAP		- - -	06/21/16	06/30/23	290,000										347,807
CTF Boat Ramps - CAP	I		06/21/16 06/26/08	06/30/23 06/15/23	290,000 927,000	-	-	-	-	-	-	-	-	-	347,807 132,215
CTF Boat Ramps - CAP CTF Dredging			06/21/16 06/26/08 06/16/10	06/30/23 06/15/23 06/15/24	290,000	-	-	-	-	-	-	-	-	-	347,807
CTF Boat Ramps - CAP CTF Dredging CTF Boat Ramp Renovations			06/21/16 06/26/08 06/16/10 06/14/11	06/30/23 06/15/23 06/15/24 06/15/21	290,000 927,000 419,250 250,000	-	-	-	-	-	-	•	-		347,807 132,215 270,275 139,750
CTF Boat Ramps - CAP CTF Dredging CTF Boat Ramp Renovations CTF Dredging East Bay & Blish Point			06/21/16 06/26/08 06/16/10 06/14/11 06/14/11	06/30/23 06/15/23 06/15/24 06/15/21 06/15/21	290,000 927,000 419,250 250,000 665,000	- - - - -			-	- - - - -	-	-	-	- - - -	347,807 132,215 270,275 139,750 363,350
CTF Boat Ramps - CAP CTF Dredging CTF Boat Ramp Renovations CTF Dredging East Bay & Blish Point CTF Prince Cove/Hayward Rd. Boat Ramp	- - -		06/21/16 06/26/08 06/16/10 06/14/11 06/14/11 06/14/11	06/30/23 06/15/23 06/15/24 06/15/21	290,000 927,000 419,250 250,000	-		-	- - - - -	-	-	-		- - -	347,807 132,215 270,275 139,750
CTF Boat Ramps - CAP CTF Dredging CTF Boat Ramp Renovations CTF Dredging East Bay & Blish Point			06/21/16 06/26/08 06/16/10 06/14/11 06/14/11 06/14/11 11/22/13	06/30/23 06/15/23 06/15/24 06/15/21 06/15/21 06/15/26	290,000 927,000 419,250 250,000 665,000 600,000				- - - - -		-	-	- - - - - - -	- - - -	347,807 132,215 270,275 139,750 363,350 482,800
CTF Boat Ramps - CAP CTF Dredging CTF Boat Ramp Renovations CTF Dredging East Bay & Blish Point CTF Prince Cove/Hayward Rd. Boat Ramp CTF East Bay Dredging CTF Hyannis Harbor Bulkhead Construction		I	06/21/16 06/26/08 06/16/10 06/14/11 06/14/11 06/14/11 11/22/13 11/22/13	06/30/23 06/15/23 06/15/24 06/15/21 06/15/26 11/15/23 11/15/23	290,000 927,000 419,250 250,000 665,000 600,000 600,000 142,000	- - - - - - - -	- - - - - - - -		- - - - - - -		- - - - - - -		- - - - - - -	- - - - - - -	347,807 132,215 270,275 139,750 363,350 482,800 531,000 115,175
CTF Boat Ramps - CAP CTF Dredging CTF Boat Ramp Renovations CTF Dredging East Bay & Blish Point CTF Prince Cove/Hayward Rd. Boat Ramp CTF East Bay Dredging CTF Hyannis Harbor Bulkhead Construction CTF Millway Boat Ramp & Dock Upgrades		I	06/21/16 06/26/08 06/16/10 06/14/11 06/14/11 10/14/11 11/22/13 11/22/13	06/30/23 06/15/23 06/15/24 06/15/21 06/15/21 06/15/26 11/15/23 11/15/23 11/15/23	290,000 927,000 419,250 250,000 665,000 600,000 600,000 142,000 133,000	- - - - - -		- - - - - - -	- - - - - - -	- - - - - -	- - - - - - - - - -	-	-	- - - - - - - - - - - -	347,807 132,215 270,275 139,750 363,350 482,800 531,000 115,175 109,500
CTF Boat Ramps - CAP CTF Dredging CTF Boat Ramp Renovations CTF Dredging East Bay & Blish Point CTF Prince Cove/Hayward Rd. Boat Ramp CTF East Bay Dredging CTF Hannis Harbors Bulkhead Construction CTF Millway Boat Ramp & Dock Upgrades CTF Blish Point Sand Management		I	06/21/16 06/26/08 06/16/10 06/14/11 06/14/11 11/22/13 11/22/13 11/22/13 02/17/15	06/30/23 06/15/23 06/15/24 06/15/21 06/15/21 06/15/26 11/15/23 11/15/23 11/15/23 02/15/20	290,000 927,000 419,250 250,000 665,000 600,000 600,000 142,000 133,000 215,000	- - - - - - - - - - - - - - -			- - - - - - -	- - - - - -		-	- - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - -	347,807 132,215 270,275 139,750 363,350 482,800 531,000 115,175 109,500 186,750
CTF Boat Ramps - CAP CTF Dredging CTF Boat Ramp Renovations CTF Dredging East Bay & Blish Point CTF Prince Cove/Hayward Rd. Boat Ramp CTF East Bay Dredging CTF Hyannis Harbor Bulkhead Construction CTF Milway Boat Ramp & Dock Upgrades CTF Blish Point Sand Management CTF Dredge Permitting/Planning		I	06/21/16 06/26/08 06/16/10 06/14/11 06/14/11 11/22/13 11/22/13 11/22/13 02/17/15	06/30/23 06/15/23 06/15/24 06/15/21 06/15/21 06/15/26 11/15/23 11/15/23 11/15/23 02/15/20	290,000 927,000 419,250 250,000 665,000 600,000 600,000 142,000 133,000 215,000 341,000		-		- - - - - - - - - - - - - - - - - - -		- - - - - - - - - -	-	-	- - - - - - - - - - - -	347,807 132,215 270,275 139,750 363,350 482,800 531,000 115,175 109,500 186,750 296,875
CTF Boat Ramps - CAP CTF Dredging CTF Boat Ramp Renovations CTF Dredging East Bay & Blish Point CTF Prince Cove/Hayward Rd. Boat Ramp CTF East Bay Dredging CTF Hay Dredging CTF Hilsh Point Sand Management CTF Dredge Permitting/Planning CTF Marstons Mills Fish Run Reconstruction		 	06/21/16 06/26/08 06/16/10 06/14/11 06/14/11 11/22/13 11/22/13 11/22/13 02/17/15 02/17/15	06/30/23 06/15/23 06/15/24 06/15/21 06/15/21 06/15/26 11/15/23 11/15/23 11/15/23 02/15/20 02/15/20	290,000 927,000 419,250 250,000 665,000 600,000 142,000 133,000 215,000 341,000 326,000	- - - - - - - - - - - - - - - - 21,625	- - - - - - - - - - - - - - - - - - -			- - - - - - - - - - - - - - - - - - -				- - - - - - - - - - - - - - - - - - -	347,807 132,215 270,275 139,750 363,350 482,800 531,000 115,175 109,500 186,750 296,875 366,150
CTF Boat Ramps - CAP CTF Dredging CTF Dredging East Bay & Blish Point CTF Price Cove/Hayward Rd. Boat Ramp CTF Fince Cove/Hayward Rd. Boat Ramp CTF East Bay Dredging CTF Hyannis Harbor Bulkhead Construction CTF Millway Boat Ramp & Dock Upgrades CTF Blish Point Sand Management CTF Dredge Permitting/Planning CTF Marstons Mills Fish Run Reconstruction CTF Paving: Bay Stree Boat Ramp (#2015-099)			06/21/16 06/26/08 06/16/10 06/14/11 06/14/11 11/22/13 11/22/13 11/22/13 02/17/15 02/17/15 02/17/15 02/17/15	06/30/23 06/15/23 06/15/24 06/15/21 06/15/26 11/15/23 11/15/23 11/15/23 02/15/20 02/15/20 02/15/30 06/30/26	290,000 927,000 419,250 250,000 665,000 600,000 142,000 133,000 215,000 341,000 325,000 142,000		-	- - - - - - - - - - - - - - - - 20,600	- - - - - - - - - - - - - - -			-	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	347,807 132,215 270,275 139,750 363,350 482,800 531,000 115,175 109,500 186,750 296,875 366,150 171,122
CTF Boat Ramps - CAP CTF Dredging CTF Dredging East Bay & Blish Point CTF Prince Cove/Hayward Rd. Boat Ramp CTF Prince Cove/Hayward Rd. Boat Ramp CTF East Bay Dredging CTF Hyannis Harbor Bulkhead Construction CTF Millway Boat Ramp & Dock Upgrades CTF Blish Point Sand Management CTF Dredge Permitting/Planning CTF Marstons Mills Fish Run Reconstruction CTF Paving: Bay Stree Boat Ramp (#2015-099) CTF Channel Dredging-Barnstable Harbor (#2016-035)		 	06/21/16 06/26/08 06/16/10 06/14/11 06/14/11 11/22/13 11/22/13 11/22/13 02/17/15 02/17/15 02/17/15 02/17/15	06/30/23 06/15/23 06/15/24 06/15/21 06/15/21 06/15/26 11/15/23 11/15/23 11/15/23 02/15/20 02/15/20	290,000 927,000 419,250 250,000 665,000 600,000 142,000 133,000 215,000 341,000 326,000	- - - - - - - - - - - - - 21,625 - -	- - - - - - - - 21,125	- - - - - - - - - - - 20,600 - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -			· · · · · · ·		347,807 132,215 270,275 139,750 363,350 482,800 531,000 115,175 109,500 186,750 296,875 366,150 171,122 595,656
CTF Boat Ramps - CAP CTF Dredging CTF Dredging East Bay & Blish Point CTF Price Cove/Hayward Rd. Boat Ramp CTF Fince Cove/Hayward Rd. Boat Ramp CTF East Bay Dredging CTF Hyannis Harbor Bulkhead Construction CTF Millway Boat Ramp & Dock Upgrades CTF Millway Boat Ramp & Dock Upgrades CTF Dredge Permitting/Planning CTF Arstons Mills Fish Run Reconstruction CTF Paving: Bay Stree Boat Ramp (#2015-099)			06/21/16 06/26/08 06/16/10 06/14/11 06/14/11 11/22/13 11/22/13 11/22/13 02/17/15 02/17/15 02/17/15 02/17/15	06/30/23 06/15/23 06/15/24 06/15/21 06/15/26 11/15/23 11/15/23 11/15/23 02/15/20 02/15/20 02/15/30 06/30/26	290,000 927,000 419,250 250,000 665,000 600,000 142,000 133,000 215,000 341,000 325,000 142,000	- - - - - - - - - - - - - - - - 21,625	- - - - - - - - - - - - - - - - 21,125	- - - - - - - - - - - - - - - - - - -				- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	347,807 132,215 270,275 139,750 363,350 482,800 531,000 115,175 109,500 186,750 296,875 366,150 171,122
CTF Boat Ramps - CAP CTF Dredging CTF Boat Ramp Renovations CTF Dredging East Bay & Blish Point CTF Prince Cove/Hayward Rd. Boat Ramp CTF East Bay Dredging CTF Hyanis Harbor Bulkhead Construction CTF Millway Boat Ramp & Dock Upgrades CTF Blish Point Sand Management CTF Dredge Permitting/Planning CTF Marstons Mills Fish Run Reconstruction CTF Paving: Bay Stree Boat Ramp (#2015-099) CTF Channel Dredging-Barnstable Harbor (#2016-035) Total Waterways			06/21/16 06/26/08 06/16/10 06/14/11 06/14/11 06/14/11 11/22/13 11/22/13 11/22/13 02/17/15 02/17/15 02/25/16 02/25/16	06/30/23 06/15/23 06/15/24 06/15/24 06/15/21 06/15/26 06/15/26 01/15/23 11/15/23 11/15/23 11/15/23 02/15/20 02/15/20 06/30/26	290,000 927,000 419,250 250,000 665,000 660,000 142,000 133,000 215,000 341,000 326,000 142,000	- - - - - - - - - - - - - 21,625	- - - - - - - - - - 21,125	- - - - - - - - - - - - - - 20,600		- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -		- - - - - - - - - - - - - - - - - - -		347,807 132,215 270,275 139,750 363,350 482,800 531,000 115,175 109,500 186,750 296,875 366,150 171,122 595,656 4,469,313
CTF Boat Ramps - CAP CTF Dredging CTF Dredging Renovations CTF Dredging East Bay & Blish Point CTF Prince Cove/Hayward Rd. Boat Ramp CTF East Bay Dredging CTF Haynis Harbor Bulkhead Construction CTF Millway Boat Ramp & Dock Upgrades CTF Blish Point Sand Management CTF Dredge Permitting/Planning CTF Marstons Mills Fish Run Reconstruction CTF Paving: Bay Stree Boat Ramp (#2015-099) CTF Channel Dredging- Barnstable Harbor (#2016-035) Total Waterways CTF MWPAT CW-04-31 Pool 11			06/21/16 06/26/08 06/16/10 06/14/11 06/14/11 06/14/11 11/22/13 11/22/13 11/22/13 02/17/15 02/17/15 02/25/16 02/25/16	06/30/23 06/15/23 06/15/24 06/15/24 06/15/21 06/15/20 01/15/23 11/15/23 11/15/23 11/15/23 02/15/20 02/15/30 06/30/26 07/15/20	290,000 927,000 419,250 250,000 660,000 600,000 142,000 133,000 215,000 341,000 326,000 142,000 142,000	- - - - - - - - - - 21,625 - 21,625	- - - - - - - - 21,125 - 21,125 -	- - - - - - - - - - 20,600 - - 20,600		- - - - - - - - - - - - - - - - - - -					347,807 132,215 270,275 139,750 363,350 482,800 531,000 115,175 109,500 186,750 296,875 366,150 171,122 595,656 4,469,313
CTF Boat Ramps - CAP CTF Dredging CTF Boat Ramp Renovations CTF Dredging East Bay & Blish Point CTF Price Cove/Hayward Rd. Boat Ramp CTF East Bay Dredging CTF Hyannis Harbor Bulkhead Construction CTF Millway Boat Ramp & Dock Upgrades CTF Blish Point Sand Management CTF Dredge Permitting/Planning CTF Marstons Mills Fish Run Reconstruction CTF Paving: Bay Stree Boat Ramp (#2015-099) CTF Channel Dredging- Barnstable Harbor (#2016-035) Total Waterways CTF MWPAT CW-04-31 Pool 11 CTF Coastal Water Quality Improvements	I I I I I I I I I I I I I I I I I I I I I I I O		06/21/16 06/26/08 06/16/10 06/14/11 06/14/11 11/22/13 11/22/13 11/22/13 11/22/13 02/17/15 02/17/15 02/17/15 02/25/16 02/25/16	06/30/23 06/15/23 06/15/24 06/15/21 06/15/21 06/15/21 06/15/21 01/15/23 11/15/23 11/15/23 02/15/20 02/15/20 06/30/26 06/30/26 07/15/20 06/15/18	290,000 927,000 419,250 250,000 665,000 600,000 142,000 133,000 321,000 326,000 142,000 490,000 334,000 3389,216 250,000	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -		- - - - - - - - - - - - - - - - - - -			- - - - - - - - - - - - - - - - - - -		347,807 132,215 270,275 139,750 363,350 482,800 531,000 115,175 109,500 186,750 286,875 366,150 171,122 595,656 4,469,313 169,997 51,180
CTF Boat Ramps - CAP CTF Dredging CTF Boat Ramp Renovations CTF Dredging East Bay & Blish Point CTF Price Cove/Hayward Rd. Boat Ramp CTF East Bay Dredging CTF Hyannis Harbor Bulkhead Construction CTF Millway Boat Ramp & Dock Upgrades CTF Millway Boat Ramp & Dock Upgrades CTF Dish Point Sand Management CTF Dredge Permitting/Planning CTF Arstons Mills Fish Run Reconstruction CTF Paving: Bay Stree Boat Ramp (#2015-099) CTF Channel Dredging-Barnstable Harbor (#2016-035) Total Waterways CTF MWPAT CW-04-31 Pool 11 CTF Coastal Water Quality Improvements CTF Lake & Pond Improvements			06/21/16 06/26/08 06/16/10 06/14/11 06/14/11 06/14/11 11/22/13 11/22/13 11/22/13 11/22/13 02/17/15 02/17/15 02/17/15 02/25/16 02/25/16 02/25/16 02/25/16	06/30/23 06/15/23 06/15/24 06/15/21 06/15/21 06/15/26 11/15/23 11/15/23 11/15/23 02/15/20 02/15/20 02/15/20 06/30/26 06/30/26	290,000 927,000 419,250 250,000 665,000 600,000 142,000 133,000 215,000 341,000 341,000 342,000 490,000 389,216 250,000	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -					- - - - - - - - - - - - - - - - - - -		347,807 132,215 270,275 139,750 363,350 482,800 531,000 115,175 109,500 186,750 296,875 366,150 171,122 595,656 4,469,313 169,997 51,180
CTF Boat Ramps - CAP CTF Dredging CTF Boat Ramp Renovations CTF Dredging East Bay & Blish Point CTF Prince Cove/Hayward Rd. Boat Ramp CTF East Bay Dredging CTF Hyannis Harbor Bulkhead Construction CTF Millway Boat Ramp & Dock Upgrades CTF Millway Boat Ramp & Dock Upgrades CTF Bish Point Sand Management CTF Dredge Permitting/Planning CTF Arstons Mills Fish Run Reconstruction CTF Paving: Bay Stree Boat Ramp (#2015-099) CTF Channel Dredging-Barnstable Harbor (#2016-035) Total Waterways CTF MWPAT CW-04-31 Pool 11 CTF Castal Water Quality Improvements CTF Lake A Pond Improvements CTF Lake Treatment	I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I		06/21/16 06/26/08 06/16/10 06/14/11 06/14/11 06/14/11 11/22/13 11/22/13 11/22/13 02/17/15 02/17/15 02/25/16 02/25/16 02/25/16 02/25/16 02/25/16	06/30/23 06/15/23 06/15/24 06/15/21 06/15/21 06/15/26 11/15/23 11/15/23 11/15/23 02/15/20 02/15/30 06/30/26 06/30/26 06/15/18 06/15/18	290,000 927,000 419,250 250,000 665,000 600,000 142,000 133,000 215,000 341,000 325,000 142,000 490,000 389,216 250,000 255,000	- - - - - - - - - - - - - - - - 21,625 - - - - 21,625 - - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - 21,125 - - 21,125 - - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - 20,600 - - - - - - - - - - - - - - - - - -							347,807 132,215 270,275 139,750 363,350 482,800 531,000 115,175 109,500 186,750 296,875 366,150 171,122 595,656 4,469,313 169,997 51,180 51,180 179,913
CTF Boat Ramps - CAP CTF Dredging CTF Boat Ramp Renovations CTF Dredging East Bay & Blish Point CTF Prince Cove/Hayward Rd. Boat Ramp CTF Faits Bay Dredging CTF Hyannis Harbor Bulkhead Construction CTF Millway Boat Ramp & Dock Upgrades CTF Blish Point Sand Management CTF Dredge Permitting/Planning CTF Marstons Mills Fish Run Reconstruction CTF Paving: Bay Stree Boat Ramp (#2015-099) CTF Channel Dredging- Barnstable Harbor (#2016-035) Total Waterways CTF MWPAT CW-04-31 Pool 11 CTF Coastal Water Quality Improvements CTF Lake & Pond Improvements CTF Lake Treatment CTF Nitrogen Management CW-04-31-A	I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I		06/21/16 06/26/08 06/16/10 06/14/11 06/14/11 06/14/11 11/22/13 11/22/13 11/22/13 02/17/15 02/17/15 02/17/15 02/25/16 02/25/16 02/25/16 06/26/08 06/26/08 06/26/08	06/30/23 06/15/23 06/15/24 06/15/21 06/15/21 06/15/21 06/15/23 11/15/23 11/15/23 02/15/20 02/15/20 06/30/26 06/30/26 06/15/18 06/15/18	290,000 927,000 419,250 255,000 665,000 142,000 133,000 215,000 326,000 142,000 490,000 389,216 250,000 255,000 211,460	- - - - - - - - - - - - - - - - 21,625 - - - 21,625 - - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - 20,600 - - - 20,600 - - - - - - - - - - - - - - - - - -							347,807 132,215 270,275 139,750 363,350 482,800 531,000 115,175 109,500 186,750 296,875 366,150 171,122 595,656 4,469,313 169,997 51,180 51,180
CTF Boat Ramps - CAP CTF Dredging CTF Dredging East Bay & Blish Point CTF Prince Cove/Hayward Rd. Boat Ramp CTF East Bay Dredging CTF Hyannis Harbor Bulkhead Construction CTF Millway Boat Ramp & Dock Upgrades CTF Millway Boat Ramp & Dock Upgrades CTF Bish Point Sand Management CTF Dredge Permitting/Planning CTF Marstons Mills Fish Run Reconstruction CTF Paving: Bay Stree Boat Ramp (#2015-099) CTF Channel Dredging-Barnstable Harbor (#2016-035) Total Waterways CTF MWPAT CW-04-31 Pool 11 CTF Coastal Water Quality Improvements CTF Lake & Pond Improvements CTF Lake Treatment	I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I		06/21/16 06/26/08 06/16/10 06/14/11 06/14/11 06/14/11 11/22/13 11/22/13 02/17/15 02/17/15 02/25/16 02/25/16 02/25/16 02/25/16 06/26/08 06/26/08 06/26/08 06/26/08	06/30/23 06/15/23 06/15/24 06/15/21 06/15/21 06/15/26 11/15/23 11/15/23 11/15/23 02/15/20 02/15/30 06/30/26 06/30/26 06/15/18 06/15/18	290,000 927,000 419,250 250,000 665,000 600,000 142,000 133,000 215,000 341,000 325,000 142,000 490,000 389,216 250,000 255,000	- - - - - - - - - - - - - - - - 21,625 - - - - 21,625 - - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - 21,125 - - 21,125 - - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - 20,600 - - - - - - - - - - - - - - - - - -							347,807 132,215 270,275 139,750 363,350 482,800 531,000 115,175 109,500 186,750 296,875 366,150 171,122 595,656 4,469,313 169,997 51,180 51,180

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Purpose	Debt			Maturity	Original	Payments	Payments	Payments	Payments	Payments	Payments	Payments	Payments	Payments	Balance
GENERAL FUND INTEREST & PRINCIPAL	Limit	-		Date	Amount	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033	FY2034	FY2035	FY2036	
CTF Water Quality Evaluation	1	1	11/22/13	11/15/23	230,000	-	-	-	-	-	-	-	-	-	198,000
CTF Sewer Expansion Analysis	Т	1	11/22/13	11/15/18	70,000	-	-	-	-	-	-	-	-	-	41,175
CTF Hamblin Pond Alum Treatment (#2015-112)	I	I	02/25/16	06/30/31	300,000	22,125	21,625	21,200	20,600	-	-	-	-	-	377,033
Total Water Quality						22,125	21,625	21,200	20,600	-	-	-	-	-	1,399,134
TOTAL GENERAL FUND BOND OBLI	GATION	IS				1,001,169	943,931	903,950	779,450	633,600	606,950	590,600	574,250	442,900	53,331,817
Purpose	Debt			Maturity	Original	Payments	Payments	Payments	Payments	Payments	Payments	Payments		Payments	
ENTERPRISE FUND INTEREST & PRINCIPAL	Limit	-		Date	Amount	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033	FY2034	FY2035	FY2036	
Airport (O)	0	I	06/14/11	06/15/31	730,000	52,663	50,863	54,063	52,063	-	-	-	-	-	790,000
Total Airport Fund Bonds						52,663	50,863	54,063	52,063	-	-	-	-	-	790,000
Hyannis Golf Course Acquisition \$3,900,000 Refunded	1	1	02/17/15		1,951,500	-	-	-	-	-	-	-	-	-	2,401,820
Olde Barnstable Golf Course Maintenance Equipment	1			02/15/20	200,000	-	-	-	-	-	-	-	-	-	176,200
Olde Barnstable Building Improvements (#2015-105)	1		02/25/16		174,000	-	-	-	-	-	-	-	-	-	214,767
Hyannis Building Improvements (#2015-106)	Т		02/25/16	06/30/26	140,000	-	-	-	-	-	-	-	-	-	172,244
Total Golf Course						-	-	-	-	-	-	-	-	-	3,256,231
			aa (aa (
Sewer 98-27, Series 5	1			08/01/19	329,295	-	-	-	-	-	-	-	-	-	115,416
Sewer 98-27	1	1		08/01/19	· · · ·	-	-	-	-	-	-	-	-	-	(38,581)
Sewer 98-42, Series 5	1			08/01/19	216,429	-	-	-	-	-	-	-	-	-	71,881
Sewer 98-42, Series 5	1			08/01/19	(subsidy)	-	-	-	-	-	-	-	-	-	(15,806)
Sewer 98-44, Series 5	1		08/25/04		112,262	-	-	-	-	-	-	-	-	-	38,264
Sewer 98-44, Series 5	1			08/01/19	(subsidy)	-	-	-	-	-	-	-	-	-	(13,191)
Sewer 98-46, Series 5	1			08/01/19	1,398,265										479,342
Sewer 98-46, Series 5	1	<u> </u>		08/01/19	(subsidy)	-	-	-	-	-	-	-	-	-	(164,359)
Shallow Well Injection - CW-00-60 - Pool 8	1	L.	08/25/04	08/01/22 08/01/22	436,370 (subsidy)	-	-	-	-	-	-	-	-	-	225,647
Shallow Well Injection - CW-00-60 - Pool 8 Sewer 98-44A	1	÷		08/01/22	· //					-	-				(75,617)
Sewer 98-44A Sewer 98-44A		÷		08/01/23	1,582,178 (subsidy)	-	-	-	-	-	-	-	-	-	(349,389)
Sewer 98-44A Sewer 98-49A		÷		08/01/23	(Subsidy) 556,458	-	-		-	-		-	-	-	353,530
Sewer 98-49A Sewer 98-49A		H	12/14/06	08/01/23	(subsidy)	-	-		-	-	-	-	-	-	(122,744)
Waste Water Treament Plant Sewer Turbine Generator \$570,000 Refunded	i	÷	06/21/16		251,000	25,500	-	-	-	-	-	-	-	-	305,466
Waste Water Treament Plant Sewer Turbine Generator	i	÷	06/26/08		570,000	23,500	_		-	_		-	-	-	51,180
MWPAT CW-04-35	0	÷	12/15/09		4,938,114	326,668			-			-		-	3,920,019
Sewer 05-28 Restructured	ō	l i	03/15/11		629,403	41,637	41,636	-	-	-	-	-	-	-	541,275
Sewer (I)	Ŭ Ŭ			06/15/21	300,000	-	-	-	-	-	-	-	-	-	167,700
Sewer CW-04-35A Pool 13	i	i	06/06/12		1,469,137	107,193	-	-	-	-	-	-	-	-	1,287,165
Rehab Clarifiers (#2015-091)	0	1	02/25/16		1,000,000	62,813	61,563	60,500	59,000	57,500	56,000	54,500	53,000	51,500	1,327,373
Pump Station/Sewer Main Const (#2009-132)	1	I	02/25/16		318,000	-	-	-	-	-	-	-	-	-	354,967
Total Sewer Enterprise Fun	d	•				563,810	103,199	60,500	59,000	57,500	56,000	54,500	53,000	51,500	9,655,435
											,				.,,
Solid Waste Landfill Closure - 98-24, Series 4	0	1	08/25/04	08/01/18	5,166,301	-	-	-	-	-	-	-	-	-	1,410,539
Solid Waste Landfill Closure - 98-24, Series 4	0	1		08/01/18	(subsidy)	-	-	-	-	-	-	-	-	-	(423,797)
Solid Waste Facility (I) \$630,000 Refunded	1	1	02/17/15	02/15/27	284,900	-	-	-	-	-	-	-	-	-	353,336
Advance Refund 6/15/2003 Transfer Station Improvements	0	I	04/18/12		241,500	-	-	-	-	-	-	-	-	-	186,325
Total Solid Waste Fund	•	•				-	-	-	-	-	-	-	-	-	1,557,603
Water Co. (Level Debt) (O) \$10,000,000 Refunded	1	I	02/17/15	02/15/27	5,704,800	-	-	-	-	-	-	-	-	-	7,135,177
MWPAT DWS-09-02	0	1		07/15/30	2,788,911	169,184	169,184	169,184	169,184	-	-	-	-	-	2,537,765
DW-09-02 Series 16	0	1	05/14/15		533,117	35,439	35,487	35,536	35,586	35,637	35,689	-	-	-	600,297
DW-09-02 Series 16															
DW-09-02 Series 16 DWP-11-09 Series 17A	0	I	05/14/15	01/15/33	793,438	53,215	53,298	53,381	53,466	53,553	53,643	-	-	-	900,993

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Purpose	Debt			Maturity	Original	Payments	Payments	Payments	Payments	Payments	Payments	Payments	Payments	Payments	
ENTERPRISE FUND INTEREST & PRINCIPAL	Limit	Limi		Date	Amount	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033	FY2034	FY2035	FY2036	
Water Main Loop	1	1	02/17/15	02/15/35	540,000	35,138	34,388	23,600	23,000	22,400	21,800	21,200	20,600	-	661,688
MCWT Series 19 DWP-13-01	0	1		06/30/36	2,418,547	148,286	148,501	148,720	148,945	149,174	149,408	149,647	149,891	150,141	2,957,423
Water Main Replacement (#2010-097)	0		02/25/16		380,000	-	-	-	-	-	-	-	-	-	424,778
Pipe Replacement Upgrade FY17 (#2015-085)	0	1	02/25/16		900,000	56,531	55,406	54,450	53,100	51,750	50,400	49,050	47,700	46,350	1,194,636
Paint/Repair Mary Dunn 2 (#2015-087)	I	1	02/25/16	06/30/21	615,000	-	-	-	-	-	-	-	-	-	687,517
Total Water Enterprise Fu	nd					532,326	530,850	519,512	517,978	347,267	345,752	219,897	218,191	196,491	18,178,973
CTF Marina Bulkhead Repair I	I		06/14/11	06/15/20	725,000	39,200	37,800	36,400			-		-	-	672,038
Marina Bulkhead Repair I				06/15/30	525,000	39,200	38,000	41,600	-	-		-		-	550,988
Advance Refund 6/14/2004 Prince Cove Marina Acquisition		l :		09/15/22	864,000	- 35,400		41,000	-	-		-	-	-	734,045
Gateway Marina Dredging (#2015-108)				06/30/26	280,000	-	-	-	-	-		-	-	-	338,889
Prince Cover Marina Bulkhead (#2015-109)	+ :	l :		06/30/26	570,000	36,788	36,038	35,400	29,500	28,750	28,000	27,250	26,500	25,750	750,699
Hyannis Harbour Bulkhead (#2015-109)				06/30/30	158,000	30,788	50,050	55,400	29,500	28,750	28,000	27,250	20,500	25,750	176,144
	-		02/23/10	00/30/21	158,000	115,388	- 111,838	113,400	29,500	28,750	28,000	27,250	26,500	- 25,750	3,222,802
Total Marina Enterprise F	ina					115,500	111,050	115,400	29,500	28,750	28,000	27,250	20,500	25,750	3,222,802
Candy Neels Reach House II	1	1	06/14/11	06/15/26	81 000	-	-	-		-	-		-	-	67 225
Sandy Neck Beach House II		H	06/14/11		81,000 966,491	- 70,081	67,681	- 70,281	67,681	-			-	-	67,225 1,049,819
Sandy Neck Beach House I										-	-	-	-	-	
Sandy Neck Beach House III		1	06/14/11	06/15/31	217,509	17,419	16,819	16,219	15,619						227,506
Total Sandy Neck Enterprise	rund					87,500	84,500	86,500	83,300	-	-	-	-	-	1,344,550
CTF HYCC 1 (I) \$1,000,000 Refunded	1		02/17/15		474,900	-	-	-	-	-	-	-	-	-	589,171
CTF HYCC 2 (I) \$8,000,000 Refunded	-			02/15/27	3,794,400	-	-	-	-	-	-	-	-	-	4,706,455
CTF HYCC 3 (I) \$1,600,000 Refunded	1	1		02/15/27	759,000	-	-	-	-	-	-	-	-	-	941,535
CTF HYCC 4 (I) \$6,765,000 Refunded				06/30/28	3,320,000	316,200	-	-	-	-	-	-	-	-	4,033,397
CTF HYCC 4			06/26/08	06/15/28	6,765,000	-	-	-	-	-	-	-	-	-	720,785
Total HYCC Enterprise Fu	nd					316,200	-	-	-	-	-	-	-	-	11,542,543
					<u></u>	_	_	-		-	_			-	
	Debt			Maturity	Original	Payments	Payments	Payments	Payments	Payments			Payments		
OTHER FUND INTEREST & PRINCIPAL	Limit	Limi	t Date	Date	Amount	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033	FY2034	FY2035	FY2036	07.092
OTHER FUND INTEREST & PRINCIPAL Land Acquisition - 2004-105 Bonehill \$200k Refunded	Limit I	Limit	Date 02/17/15	Date 02/15/25	Amount 90,850	FY2028 -	FY2029 -	FY2030		FY2032	FY2033	FY2034	FY2035 -	FY2036 -	97,082
OTHER FUND INTEREST & PRINCIPAL Land Acquisition - 2004-105 Bonehill \$200k Refunded Land Acquisition - 06-15-05 - 2004-106 \$180k Refunded	Limit I	Limit I	Date 02/17/15 02/17/15	Date 02/15/25 02/15/25	Amount 90,850 73,600	FY2028 - -	FY2029 - -	FY2030	FY2031 - -	FY2032	FY2033	FY2034	FY2035 - -	FY2036 - -	74,189
OTHER FUND INTEREST & PRINCIPAL Land Acquisition - 2004-105 Bonehill \$200k Refunded Land Acquisition - 06-15-05 - 2004-106 \$180k Refunded Land Acquisition - Hyannis Golf \$5,500,000 Refunded	Limit I I I	Limi ^t I	t Date 02/17/15 02/17/15 02/17/15	Date 02/15/25 02/15/25 02/15/25	Amount 90,850 73,600 2,496,300	FY2028 - -	FY2029 - - -	FY2030	FY2031 - - -	FY2032	FY2033	FY2034	FY2035 - - -	FY2036 - - -	74,189 2,685,817
OTHER FUND INTEREST & PRINCIPAL Land Acquisition - 2004-105 Bonehill \$200k Refunded Land Acquisition - 06-15-05 - 2004-106 \$180k Refunded Land Acquisition - Hyannis Golf \$5,500,000 Refunded Land Acquisition - Archibald \$500,000 Refunded	Limit I I I	Limit I I I	t Date 02/17/15 02/17/15 02/17/15 02/17/15	Date 02/15/25 02/15/25 02/15/25 02/15/26	Amount 90,850 73,600 2,496,300 212,100	FY2028 - - - -	FY2029 - - - -	FY2030	FY2031 - - - -	FY2032	FY2033	FY2034	FY2035 - - - -	FY2036 - - - -	74,189 2,685,817 260,780
OTHER FUND INTEREST & PRINCIPAL Land Acquisition - 2004-105 Bonehill \$200k Refunded Land Acquisition - 06-15-05 - 2004-106 \$180k Refunded Land Acquisition - Hyannis Golf \$5,500,000 Refunded Land Acquisition - Archibald \$500,000 Refunded Town Hall Renovations	Limit I I I I I	Limit	Date 02/17/15 02/17/15 02/17/15 02/17/15 02/17/15 02/17/15 02/17/15 02/17/15	Date 02/15/25 02/15/25 02/15/25 02/15/26 06/15/30	Amount 90,850 73,600 2,496,300 212,100 1,332,520	FY2028 - - - - 72,638	FY2029 - - - - 70,200	FY2030	FY2031 - - - - -	FY2032	FY2033	FY2034	FY2035 - - - - - -	FY2036 - - - - - -	74,189 2,685,817 260,780 1,161,550
OTHER FUND INTEREST & PRINCIPAL Land Acquisition - 2004-105 Bonehill \$200k Refunded Land Acquisition - 06-15-05 - 2004-106 \$180k Refunded Land Acquisition - Hyannis Golf \$5,500,000 Refunded Land Acquisition - Archibald \$500,000 Refunded Town Hall Renovations Land Acquisition 1 Adv Ref6/15/2002	Limit	Limit I I I I I I	Date 02/17/15 02/17/15 02/17/15 02/17/15 02/17/15 06/16/10 06/14/11	Date 02/15/25 02/15/25 02/15/25 02/15/26 06/15/30 06/15/22	Amount 90,850 73,600 2,496,300 212,100 1,332,520 7,065,000	FY2028 - - - - - 72,638 -	FY2029 - - - - 70,200 -	FY2030	FY2031 - - - - - -	FY2032	FY2033	FY2034	FY2035	FY2036	74,189 2,685,817 260,780 1,161,550 4,402,470
OTHER FUND INTEREST & PRINCIPAL Land Acquisition - 2004-105 Bonehill \$200k Refunded Land Acquisition - 06-15-05 - 2004-106 \$180k Refunded Land Acquisition - Hyannis Golf \$5,500,000 Refunded Land Acquisition - Archibald \$500,000 Refunded Town Hall Renovations Land Acquisition 1 Adv Ref6/15/2002 Advance Refund 6/15/2003 Land Acquisitions	Limit 1 1 1 1 1 1 1 1 1 1 1	Limit	Date 02/17/15 02/17/15 02/17/15 02/17/15 02/17/15 06/16/10 06/14/11 04/18/12	Date 02/15/25 02/15/25 02/15/25 02/15/26 06/15/30 06/15/22 09/15/22	Amount 90,850 73,600 2,496,300 212,100 1,332,520 7,065,000 964,600	FY2028 - - - - - 72,638 - -	FY2029 - - - - 70,200 - - -	FY2030 - - - - - 67,600 - -	FY2031	FY2032	FY2033	FY2034	FY2035	FY2036 - - - - - - - - - -	74,189 2,685,817 260,780 1,161,550 4,402,470 747,621
OTHER FUND INTEREST & PRINCIPAL Land Acquisition - 2004-105 Bonehill \$200k Refunded Land Acquisition - 06-15-05 - 2004-106 \$180k Refunded Land Acquisition - Hyannis Golf \$5,500,000 Refunded Land Acquisition - Archibald \$500,000 Refunded Town Hall Renovations Land Acquisition 1 Adv Ref6/15/2002 Advance Refund 6/15/2003 Land Acquisitions Advance Refund 6/15/2004 Landbank Acquisitions3	Limit	Limit 1 1 1 1 1 1 1 1 1 1 1 1 1	Date 02/17/15 02/17/15 02/17/15 02/17/15 06/16/10 06/14/11 04/18/12 04/18/12	Date 02/15/25 02/15/25 02/15/25 02/15/26 06/15/30 06/15/22 09/15/22 09/15/22	Amount 90,850 73,600 2,496,300 212,100 1,332,520 7,065,000 964,600 5,385,600	FY2028 - - - - 72,638 - - - -	FY2029 - - - - 70,200 - - - - -	FY2030	FY2031	FY2032	FY2033	FY2034	FY2035	FY2036 - - - - - - - - - - - - - - -	74,189 2,685,817 260,780 1,161,550 4,402,470 747,621 4,582,316
OTHER FUND INTEREST & PRINCIPAL Land Acquisition - 2004-105 Bonehill \$200k Refunded Land Acquisition - 06-15-05 - 2004-106 \$180k Refunded Land Acquisition - Hyannis Golf \$5,500,000 Refunded Land Acquisition - Archibald \$500,000 Refunded Town Hall Renovations Land Acquisition 1 Adv Ref6/15/2002 Advance Refund 6/15/2003 Land Acquisitions Advance Refund 6/15/2004 Landbank Acquisitions3 Advance Refund 6/15/2004 Landbank Acquisitions 2	Limit 1 1 1 1 1 1 1 1 1 1 1 1 1	Limit I I I I I I	Date 02/17/15 02/17/15 02/17/15 02/17/15 06/16/10 06/14/11 04/18/12 04/18/12	Date 02/15/25 02/15/25 02/15/25 02/15/26 06/15/30 06/15/22 09/15/22	Amount 90,850 73,600 2,496,300 212,100 1,332,520 7,065,000 964,600	FY2028 - - - - 72,638 - - - - -	FY2029 - - - - 70,200 - - - - -	FY2030 - - - 67,600 - - - -	FY2031	FY2032	FY2033	FY2034	FY2035	FY2036 - - - - - - - - - - - - - - - - -	74,189 2,685,817 260,780 1,161,550 4,402,470 747,621 4,582,316 196,875
OTHER FUND INTEREST & PRINCIPAL Land Acquisition - 2004-105 Bonehill \$200k Refunded Land Acquisition - 06-15-05 - 2004-106 \$180k Refunded Land Acquisition - Hyannis Golf \$5,500,000 Refunded Land Acquisition - Archibald \$500,000 Refunded Town Hall Renovations Land Acquisition 1 Adv Ref6/15/2002 Advance Refund 6/15/2003 Land Acquisitions Advance Refund 6/15/2004 Landbank Acquisitions3	Limit 1 1 1 1 1 1 1 1 1 1 1 1 1	Limit 1 1 1 1 1 1 1 1 1 1 1 1 1	Date 02/17/15 02/17/15 02/17/15 02/17/15 06/16/10 06/14/11 04/18/12 04/18/12	Date 02/15/25 02/15/25 02/15/25 02/15/26 06/15/30 06/15/22 09/15/22 09/15/22	Amount 90,850 73,600 2,496,300 212,100 1,332,520 7,065,000 964,600 5,385,600	FY2028 - - - - 72,638 - - - -	FY2029 - - - - 70,200 - - - - -	FY2030	FY2031	FY2032	FY2033	FY2034	FY2035	FY2036 - - - - - - - - - - - - - - -	74,189 2,685,817 260,780 1,161,550 4,402,470 747,621 4,582,316
OTHER FUND INTEREST & PRINCIPAL Land Acquisition - 2004-105 Bonehill \$200k Refunded Land Acquisition - 06-15-05 - 2004-106 \$180k Refunded Land Acquisition - Hyannis Golf \$5,500,000 Refunded Land Acquisition - Archibald \$500,000 Refunded Town Hall Renovations Land Acquisition 1 Adv Ref6/15/2002 Advance Refund 6/15/2003 Land Acquisitions Advance Refund 6/15/2004 Landbank Acquisitions3 Advance Refund 6/15/2004 Landbank Acquisitions 2 Total Community Preservation	Limit 1 1 1 1 1 1 1 1 1 1 1 1 1	Limit 1 1 1 1 1 1 1 1 1 1 1 1 1	Date 02/17/15 02/17/15 02/17/15 02/17/15 06/16/10 06/14/11 04/18/12 04/18/12	Date 02/15/25 02/15/25 02/15/25 02/15/26 06/15/30 06/15/22 09/15/22 09/15/22	Amount 90,850 73,600 2,496,300 212,100 1,332,520 7,065,000 964,600 5,385,600 227,300	FY2028 - - - 72,638 - - - - - - 72,638	FY2029 - - - - 70,200 - - - - 70,200	FY2030 - - - 67,600 - - - -	FY2031	FY2032	FY2033	FY2034	FY2035	FY2036 - - - - - - - - - - - - - - - - -	74,189 2,685,817 260,780 1,161,550 4,402,470 747,621 4,582,316 196,875 14,234,700
OTHER FUND INTEREST & PRINCIPAL Land Acquisition - 2004-105 Bonehill \$200k Refunded Land Acquisition - 05-15-05 - 2004-106 \$180k Refunded Land Acquisition - Hyannis Golf \$5,500,000 Refunded Land Acquisition - Archibald \$500,000 Refunded Town Hall Renovations Land Acquisition 1 Adv Ref 6/15/2002 Advance Refund 6/15/2003 Land Acquisitions Advance Refund 6/15/2004 Landbank Acquisitions3 Advance Refund 6/15/2004 Landbank Acquisitions 2 Total Community Preservation Title V - Phase I - 97-1131 Series 6-	Limit 1 1 1 1 1 1 1 1 1 1 1 1 1	Limit 1 1 1 1 1 1 1 1 1 1 1 1 1	Date 02/17/15 02/17/15 02/17/15 02/17/15 02/17/15 06/16/10 06/14/11 04/18/12 04/18/12 04/18/12 04/18/12	Date 02/15/25 02/15/25 02/15/26 06/15/30 06/15/22 09/15/22 09/15/22 09/15/22	Amount 90,850 73,600 2,496,300 2122,100 1,332,520 7,065,000 964,600 5,385,600 227,300 197,403	FY2028 - - - - 72,638 - - - 72,638 -	FY2029 - - - - 70,200 - - - 70,200 -	FY2030 - - - 67,600 - - - - 67,600	FY2031	FY2032	FY2033	FY2034	FY2035	FY2036	74,189 2,685,817 260,780 1,161,550 4,402,470 747,621 4,582,316 196,875 14,234,700 58,753
OTHER FUND INTEREST & PRINCIPAL Land Acquisition - 2004-105 Bonehill \$200k Refunded Land Acquisition - 06-15-05 - 2004-106 \$180k Refunded Land Acquisition - Hyannis Golf \$5,500,000 Refunded Land Acquisition - Hyannis Golf \$5,500,000 Refunded Town Hall Renovations Land Acquisition 1 Adv Ref6/15/2002 Advance Refund 6/15/2003 Land Acquisitions Advance Refund 6/15/2004 Landbank Acquisitions3 Advance Refund 6/15/2004 Landbank Acquisitions 2 Total Community Preservation Title V - Phase I - 97-1131 Series 6- Title V - Phase I - 97-1131 Series 6	Limit 1 1 1 1 1 1 1 1 1 1 1 1 1	Limit 1 1 1 1 1 1 1 1 1 1 1 1 1	Date 02/17/15 02/17/15 02/17/15 02/17/15 02/17/15 06/16/10 06/14/11 04/18/12 04/18/12 04/18/12 04/18/12 04/18/12	Date 02/15/25 02/15/25 02/15/25 02/15/26 06/15/20 09/15/22 09/15/22 09/15/22 09/15/22	Amount 90,850 73,600 2,496,300 1,332,520 7,065,000 964,600 5,385,600 227,300 197,403 190,580	FY2028 - - - 72,638 - - - 72,638 - 72,638	FY2029 - - - - 70,200 - - - - 70,200	FY2030 - - - 67,600 - - - -	FY2031	FY2032	FY2033	FY2034	FY2035	FY2036 - - - - - - - - - - - - - - - - -	74,189 2,685,817 260,780 1,161,550 4,402,470 747,621 4,582,316 196,875 14,234,700 58,753 82,623
OTHER FUND INTEREST & PRINCIPAL Land Acquisition - 2004-105 Bonehill \$200k Refunded Land Acquisition - 06-15-05 - 2004-106 \$180k Refunded Land Acquisition - Hyannis Golf \$5,500,000 Refunded Land Acquisition - Archibald \$500,000 Refunded Town Hall Renovations Land Acquisition 1 Adv Ref6/15/2002 Advance Refund 6/15/2003 Land Acquisitions Advance Refund 6/15/2004 Landbank Acquisitions3 Advance Refund 6/15/2004 Landbank Acquisitions 2 Total Community Preservatio Title V - Phase I - 97-1131 Series 6- Title V - Phase I - 97-1131 Series 6 Title V - Phase III - Pool 11 T5-97-1131-2	Limit 1 1 1 1 1 1 1 1 1 1 1 1 0 0 0 0 0	Limit 1 1 1 1 1 1 1 1 1 1 1 1 1	Date 02/17/15 02/17/15 02/17/15 02/17/15 06/16/10 06/14/11 04/18/12 04/18/12 04/18/12 04/18/12 04/18/12 04/18/12	Date 02/15/25 02/15/25 02/15/25 02/15/26 06/15/30 06/15/30 06/15/30 09/15/22 09/15/22 09/15/22 08/01/20 08/01/20 08/01/22	Amount 90,850 73,600 2,496,300 1,332,520 7,065,000 964,600 5,385,600 227,300 197,403 190,580 200,000	FY2028 - - - 72,638 - - - - 72,638 - - - - - - - - - - - - - - - - - - -	FY2029 - - - - 70,200 - - - - 70,200 - - - - - - - - - - - - - - - - - -	FY2030 - - - - - - - - - - - - - - - - - -	FY2031	FY2032	FY2033	FY2034	FY2035	FY2036	74,189 2,685,817 260,780 1,161,550 4,402,470 747,621 4,582,316 196,875 14,234,700 58,753 82,623 100,000
OTHER FUND INTEREST & PRINCIPAL Land Acquisition - 2004-105 Bonehill \$200k Refunded Land Acquisition - 06-15-05 - 2004-106 \$180k Refunded Land Acquisition - Hyannis Golf \$5,500,000 Refunded Land Acquisition - Archibald \$500,000 Refunded Town Hall Renovations Land Acquisition 1 Adv Ref 6/15/2002 Advance Refund 6/15/2003 Land Acquisitions Advance Refund 6/15/2004 Landbank Acquisitions3 Advance Refund 6/15/2004 Landbank Acquisitions2 Total Community Preservation Title V - Phase I - 97-1131 Series 6- Title V - Phase I - 97-1131 Series 6 Title V - Phase III - Pool 11 T5-97-1131-2 Title V - Phase IV - Pool 11 T5-97-1131-3	Limit 1 1 1 1 1 1 1 1 1 1 1 1 1	Limit 1 1 1 1 1 1 1 1 1 1 1 1 1	Date 02/17/15 02/17/15 02/17/15 02/17/15 02/17/15 02/17/15 06/16/10 06/14/11 04/18/12 04/18/12 04/18/12 07/25/02 07/01/04 10/31/05	Date 02/15/25 02/15/25 02/15/25 02/15/26 06/15/20 06/15/20 09/15/22 09/15/22 09/15/22 08/01/20 08/01/20 08/01/20	Amount 90,850 73,600 2,496,300 1,332,520 7,065,000 964,600 5,385,600 227,300 197,403 190,580 200,000	FY2028 72,638	FY2029 - - - - 70,200 - - - 70,200 -	FY2030 - - - - - - - - - - - - - - - - - -	FY2031	FY2032	FY2033	FY2034	FY2035	FY2036	74,189 2,685,817 260,780 1,161,550 4,402,470 747,621 4,582,316 196,875 14,234,700 58,753 82,623 100,000
OTHER FUND INTEREST & PRINCIPAL Land Acquisition - 2004-105 Bonehill \$200k Refunded Land Acquisition - 06-15-05 - 2004-106 \$180k Refunded Land Acquisition - Hyannis Golf \$5,500,000 Refunded Land Acquisition - Archibald \$500,000 Refunded Town Hall Renovations Land Acquisition 1 Adv Ref6/15/2002 Advance Refund 6/15/2003 Land Acquisitions Advance Refund 6/15/2004 Landbank Acquisitions3 Advance Refund 6/15/2004 Landbank Acquisitions 2 Total Community Preservation Title V - Phase I - 97-1131 Series 6- Title V - Phase I - 97-1131 Series 6 Title V - Phase IV - Pool 11 T5-97-1131-3 Title V - Phase V - Pool 12 97-1131-4D	Limit 1 1 1 1 1 1 1 1 1 1 1 1 0 0 0 0 0	Limit 1 1 1 1 1 1 1 1 1 1 1 1 1	Date 02/17/15 02/17/15 02/17/15 02/17/15 02/17/15 02/17/15 06/16/10 06/14/11 04/18/12 04/18/12 04/18/12 07/25/02 07/01/04 10/31/05	Date 02/15/25 02/15/25 02/15/25 02/15/26 06/15/30 06/15/30 06/15/30 09/15/22 09/15/22 09/15/22 08/01/20 08/01/20 08/01/22	Amount 90,850 73,600 2,496,300 1,332,520 7,065,000 964,600 5,385,600 227,300 197,403 190,580 200,000	FY2028 72,638 72,638	FY2029 - - - - 70,200 - - - - 70,200 - - - - - - - - - - - - - - - - - -	FY2030 - - - - - - - - - - - - - - - - - -	FY2031	FY2032	FY2033	FY2034	FY2035	FY2036	74,189 2,685,817 260,780 1,161,550 4,402,470 747,621 4,582,316 196,875 14,234,700 58,753 82,623 100,000 100,000
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OTHER FUND INTEREST & PRINCIPAL Land Acquisition - 2004-105 Bonehill \$200k Refunded Land Acquisition - 05-15-05 - 2004-106 \$180k Refunded Land Acquisition - Hyannis Golf \$5,500,000 Refunded Land Acquisition - Archibald \$500,000 Refunded Town Hall Renovations Land Acquisition 1 Adv Ref 6/15/2002 Advance Refund 6/15/2003 Land Acquisitions Advance Refund 6/15/2004 Landbank Acquisitions3 Advance Refund 6/15/2004 Landbank Acquisitions 2 Total Community Preservation Title V - Phase I - 97-1131 Series 6- Title V - Phase III - 90-111 T5-97-1131-2 Title V - Phase IV - Pool 11 T5-97-1131-3 Title V - Phase IV - Pool 12 97-1131-4D Total Title V	Limit 1 1 1 1 1 1 1 1 1 1 1 1 1	Limit 1 1 1 1 1 1 1 1 1 1 1 1 1	Date 02/17/15 02/17/15 02/17/15 02/17/15 06/16/10 06/14/11 04/18/12 04/18/12 04/18/12 04/18/12 04/18/12 04/18/12 07/25/02 07/01/04 10/31/05 12/14/06	Date 02/15/25 02/15/25 02/15/25 02/15/26 06/15/30 06/15/22 09/15/22 09/15/22 09/15/22 09/15/22 09/15/22 07/15/25 07/15/25 07/15/26	Amount 90,850 73,600 2,496,300 2122,100 7,065,000 964,600 5,385,600 227,300 197,403 190,580 200,000 200,000	FY2028 72,638 72,638	FY2029	FY2030 - - - - 67,600 - - - - 67,600 - - - - - - - - - - - - - - - - - -	FY2031	FY2032	FY2033	FY2034	FY2035	FY2036	74,189 2,685,817 260,780 1,161,550 4,402,470 747,621 4,582,316 196,875 14,234,700 58,753 82,623 100,000 100,000 110,000 451,376
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APPENDIX C - CAPITAL PROJECT EVALUATION CRITERIA

2018 CIP - Appendix C – Capital Project Evaluation Criteria

CRITERIA AND STRATEGIC PLAN AREA	HIGHEST IMPACT (Score of 4)	MEDIUM IMPACT (Score of 3)	LOW IMPACT (Score of 2)	NO IMPACT OR NOT APPLICABLE (Score of 0)
PUBLIC HEALTH AND SAFETY degree to which project meets public health and safety needs/issues.	 Project is necessary to <u>alleviate a significant</u>, <u>existing</u>, <u>documented</u> health or safety hazard. This could include: Proposed project meets the minimum requirements/mandates of a local, state or federal law pertaining to health and safety of the community. Project directly pertains to the delivery of public safety through police protection. Project required to achieve adopted LOS for health or safety standards 	 Project is necessary to prevent the onset of a likely health and safety hazard or <u>alleviate an existing, minor</u> hazard. If problem does not currently exist, failure to act would result in hazard being present within one-two years. May include: Enhancement of current health and safety programs or projects; Related to, but not exclusive impact on traffic control on town's public ways; Addresses local, state or federal laws pertaining to health and safety, but goes beyond minimum requirements to additional enhancements. 	 Project is needed to <u>maintain the current</u> <u>level</u> of health and safety services provided to residents. Failure to complete project may result in appearance of hazard within 2-5 years. May include: Repair or regular maintenance of facilities in order to maintain a healthy and/or safe condition. Maintains existing traffic LOS and/or prevents formation of a safety problem. 	Project <u>does not relate to, nor</u> <u>have any impact on</u> public health and safety issues within the town.
EDUCATION applicability of project to educational priorities of the town.	Project is intended <u>directly</u> for the purpose of educating the town's children and is <u>essential</u> in order to meet state and local educational standards. This includes repair/maintenance of, as well as new buildings and structures used for classrooms, school-sponsored recreational activities, administrative support to schools, and other related projects	Project will be used <u>primarily</u> for education of the town's children, but may include other ancillary uses. Project is important, but not required in meeting minimum educational standards.	Project will be used <u>minimally</u> for direct education of the town's children. Primary use of the project will be other than education purposes. This project is not required toward meeting any educational standards, but may enhance existing programs/facilities.	Project is <u>not intended</u> to be used for educational purposes.
ECONOMIC DEVELOPMENT degree to which project meets economic development objectives of Town Council and other town plans.	 Project would have <u>significant impact</u> on the ability to retain and expand business within the town. May include: Significant impact on increasing year-round job opportunities, particularly high-paying jobs; Strong contribution to retaining existing and attracting new businesses to the town; Significant private contributions to project's future development; Substantially increases attraction for additional tourists to the town. 	 Project would make a <u>major contribution</u> to the Town's ability to retain and expand business. May include: Create expanded job opportunities, year-round and seasonal; Measurable retention of existing business and/or possible attraction of new business to the town. May involve private contributions to the project directly or indirectly; Increases attraction of additional tourists to the town. 	 Project would have <u>some contribution</u> to the Town's ability to retain and expand businesses. May include: Minimal impact on expanded job opportunities, or preventing loss of jobs; Some potential for attraction of new business to town. Little to no private contributions to the project directly or indirectly; May have some slight impact on attracting additional tourists to town. 	Project <u>does not have any impact</u> on the Town's ability to retain and expand businesses, create jobs, tourism or the tax base.

INFRASTRUCTURE AND PROTECTION OF CAPITAL ASSETS degree to which project maintains and protects existing capital assets of the town.	 Project is <u>critical to save structural integrity</u> of existing asset or repair significant structural deterioration. Failure to act would result in complete loss of the asset or would require significantly more funds if repairs are delayed. Project would meet the needs of the community for a minimum of 20 years. 	 Project is <u>necessary to repair or replace</u> assets before a partial loss of structural integrity causes the need for significant repairs. Project would last a minimum of <u>10 years.</u> Project would meet the needs of the community for a minimum of 10 years. 	 Project will <u>improve appearance, public</u> <u>accessibility and/or deter future</u> <u>maintenance</u> of this type for a minimum of <u>5 years</u>. Project would meet the needs of the community for a minimum of 5 years. 	Project does not improve or protect existing capital assets.
ENVIRONMENT AND NATURAL RESOURCES - - degree to which project conserves and protects natural and historical resources of the town.	 Project is <u>critical to preservation</u> of a well-documented natural or historic town resource. Other applicable criteria may include: Failure to approve project would result in damage or deterioration of key natural resource/environment in the near future. If not approved, project would have long-lasting negative impacts on the town's water supply or coastal resources. Failure to approve project would result in a loss of critical resources Project significantly impacts an ACEC, WP or GP designated area. Project is critical to protect / stabilize a townowned significant historic resource; 	 Project will have <u>substantial impacts</u> on the ability to preserve or maintain a key natural or historic resource for the town. Other applicable criteria may include: Project may repair natural ecological deterioration and may result in improved access by residents to enjoy resource. Maintains or improves the ecology of freshwater ponds, wetlands, or natural habitats. Project impacts GP designated district or other significant areas of concern. Project will improve / restore a historic resource as a physical record. 	 Project will improve, but is not necessary for the maintenance of a key natural or historic resource for the town. Other applicable criteria may include: May improve access by the public to enjoy the resource. May add and/or expand the greenbelt system within the Town; or otherwise expand the amount of natural habitat. Project is necessary to conserve / retain existing historic materials and/or features. 	Project <u>does not relate to or have any</u> <u>impact on</u> preservation or maintenance of natural or historic resources.
QUALITY OF LIFE degree to which project addresses town-wide quality of life for its residents.	 Project is <u>critical to the continuation</u> or needed expansion of an existing cultural and/or human service. Project is <u>required</u> to respond to a <u>documented</u> health, cultural and/or human service <u>need</u>. Project <u>significantly expands</u> the quality of life for the residents of the town. 	 Project <u>maintains or enhances</u> the ability to deliver cultural and/or human services. Project <u>enhances the existing</u> quality of life within the town. 	 Project <u>supports</u> the delivery of cultural an/or human services. Project <u>supports the existing</u> quality of life within the town. 	 Project is <u>not related</u> to the delivery of cultural and/or human services. Project <u>does not impact</u> the quality of life within the town.
FINANCING availability of non-general fund financing overall financial feasibility.	 Project has a <u>highly positive fiscal impact</u> due to the following: Implementing project would result in significant increased revenues to the town or significantly expands the non-residential tax base; Non-general fund revenues sufficient to support 75-100% of project expense; and have been identified and applied for. 	 Project has a <u>generally positive fiscal impact</u> due to the following: Project would result some increased revenue to the town or increases the non- residential tax base somewhat; Non-general fund revenues sufficient to support 25-74% of project expense have been identified. 	 Project has a <u>neutral to slightly positive</u> <u>fiscal impact</u> due to the following: Additional revenues would not offset additional costs. Project supported by 1-25% of non- general fund revenues. 	 Project has a <u>negative fiscal impact</u> due to the following: None of the cost of the project will be funded by non-general funds. Project would not bring in additional revenues.

OPERATING BUDGET IMPACT degree to which project is required to reduce or eliminate short-term operating costs; and its impact on future operating budget.	 Project has a <u>highly positive impact on the operating budget</u> due to: Implementing project would substantially decrease current operating fund expenditures due to current excessive maintenance, patching, etc. costing more than 50% of the cost of the project, prorated over 3 years; 100% of future operating costs can be absorbed within existing budgets once project is completed. Not doing project would result in significant increased operating costs to the town in the near future (i.e. major repair versus complete replacement). 	 Project has a <u>generally positive impact on</u> <u>the operating budget</u> due to: Implementing project may moderately decrease current operating fund expenditures due to on-going repairs, maintenance, etc. costing between 25-50% of cost of the project prorated over 3 years; Project would result in minimal increase in future operating costs for the benefits gained; Not doing project would result in a noticeable, but not significant increase in expenditure of operating funds to repair or make asset usable in the short term. 	Project has a <u>neutral to slightly positive</u> <u>impact on the operating</u> budget due to: Implementing project may decrease or have a neutral affect on current operating fund expenditures due to on-going repair, maintenance, etc. costing up to 25% of the cost of the project prorated over 3 years; Project would increase future operating costs with only minimal benefits received; Not doing project would result in the need for minimal additional operating funds for repair / maintenance of current assets.	 Projects has a <u>negative impact on the operating budget</u> due to: Significant increase in current operating fund expenditures required maintaining, repairing, or otherwise operating project. Project requires significant increase in future operating fund expenditures without documented benefits
PLANNING AND RELATIONSHIP TO EXISTING PLANS how the project addresses implementation of previously developed plans of the town to protect and enhance human and physical assets.	Project is <u>specifically included in a plan</u> <u>adopted by a State, Regional or Local</u> <u>Legislative</u> body, such as: • Specifically listed in the annual Town Council Strategic Plan. • Included within the prior 5 year Capital Improvement Program • Listed as a priority in the 5 Year Capital Improvements Plan of the LCP (once adopted). • Project included in a State Bond Bill • Project is specifically listed in a plan adopted by the Town Council.	Project is part of an Executive Order or Plan of Action adopted by the School Board and/or the Town Manager, such as: • Project generally supports the policies and/or resolves adopted by the Town Council • Project is included in the current year Transportation Improvement Program (TIP). • Project <u>specifically included</u> in a plan adopted by the School Board and/or the Town Manager	Project is included as <u>part of a Town</u> <u>Departmental Work Plan</u> , or part of a functional service delivery system such as. • Project supports the Departmental Mission and prioritizes needed action • Project needed to accomplish a major service effort • Project <u>supports a plan</u> adopted by the School Board and/or the Town Manager	Project is <u>not related</u> to the plans, policies or resolves adopted by the Town Council or other agencies of the town.
USAGE AND SERVICE DEMAND degree to which project is used by population and manner in which it is used.	 Project will be in <u>continuous usage</u> or will be used year round. Project will serve <u>50 to 100%</u> of the population of the town. Project serves <u>three or more functions</u> and/or needs of the town. 	 Project will be used <u>the majority of the year</u>. Project will serve <u>25 to 75%</u> of the population of the town or is designed for a village or other sub-area of the town. Project serves at least two functions and/or needs of the town. 	 Project will be used <u>seasonally.</u> Project will serve <u>less than 25%, but</u> <u>more than 5%</u> of the population of the town or is designed for a limited service area. Project serves a <u>single service</u> and/or need of the town. 	 Project will be <u>only</u> <u>intermittently used</u>. Project will provide <u>limited</u> <u>services</u> to a very limited service area.

FY 2018 BUDGET ACTION CALENDAR

Mon	Aug	1	2016	Departments begin gathering data and photos to support Capital & Operating Budgets		
Mon	Sep	19	2016	Town Manager & School Superintendent develop annual policy agreement on		
				allocation of projected FY 2018 revenue		
Sat	Sep	24	2016	Town Council meets to review and update their Strategic Plan		
Fri	Sep	30	2016	Town Manager issues instructions to Departments for FY 2018 Operating & Capital		
				budgets		
Mon	Oct	24	2016	Municipal Departments submit preliminary listing of any proposed FY 2018 position		
				changes with supporting justification to Human Resources with copy to Town Manager		
Wed	Nov	9	2016	Town Manager conducts public hearing on Calendar Year permits and fees		
Thur	Nov	10	2016	HR Director submits position changes summary including comments to Town Manager		
Mon	Nov	14	2016	Departments submit CIP project data sheets with supporting photos and review of existing		
				capital projects.		
Tue	Nov	22	2016	Town Manager begins formal review of CIP project requests with individual		
				Department Managers		
Mon	Nov	28	2016	CIP scoring team begins review and scoring individual projects		
Thur	Dec	15	2016	Annual Organization of Town Council (TM must submit budget to Town Council within 170		
				days per M.G.L. 44 § 32) (Friday, June 2, 2017)		
Tue	Dec	21	2016	Final day for CIP scoring team to complete and submit individual project scores		
				Department Managers submit Operating Budget Decision Packages including photos		
Wed	Jan	18	2017	Department Managers submit Operating Budget Narratives including photos		
Thur	Jan	19	2017	Town Council conducts joint meeting/workshop with School Committee in		
				accordance with the Town Charter		
				Town Manager begins review of Operating Budget requests with Dept Managers		
				Town Manager conducts public hearing on <i><u>Fiscal Year</u></i> permits and fees		
Wed	Mar	15	2017	Town Manger submits recommended FY18 Capital Budget to Clerk of Town Council		
				per Part VI, Section 6-5 (a) of the Charter (TC must adopt plan BEFORE June 1, 2017)		
Tue				Town Council conducts first reading of FY18 Capital Budget Orders		
Fri				Town Council publishes FY18 Capital budget & hearing dates in local paper		
				Adopted FY18 School budget due to Town Manager		
				CFAC submits their review of recommended FY18 Capital Budget to Town Council		
Thur	Apr	6	2017	Town Council conducts first public hearing on FY18 Capital Budget per Part VI Section		
				6-5 of the Charter (hearing to be held not less than 14 days after publication)		
Thur	Apr	20	2017	Town Council conducts second public hearing on FY18 Capital Budget per Part VI		
				Section 6-5 of the Charter		
Thur	Мау	4	2017	Town Manager submits recommended FY18 Operating Budget to the Town Council		
				(TC must adopt budget within 45 days (Jun 17), otherwise it becomes part of FY18		
		_	0047	appropriations per Section 6-3 (b))		
Fri	Мау	5	2017	Town Council publishes summary of FY18 Operating Budget and Hearing dates/info		
		40	0047	in a local paper per Part VI Section 6-5		
				Town Council conducts first reading of FY18 Oerating Budget Orders		
wea	way	31	2017	Last weekday FY18 Capital Improvements Plan can be adopted by Town Council per		
Thur		4	2017	Part VI, Section 6-5 (d) of the Charter		
				CFAC submits their review of recommended FY18 Operating Budget to Town Council		
mur	Jun	÷.	2017	Town Council conducts first public hearing on recommended FY18 Operating Budget		
Thur	lus	0	2017	(Public hearing must be held not less than 14 days after such publication) Town Council conducts second public hearing on FY18 Operating Budget		
				Town Council conducts second public hearing on FY18 Operating Budget Town Council conducts third public hearing on FY18 Operating Budget (if needed)		
Fri				Last weekday FY18 Operating Budget can be adopted by Town Council per Part VI		
FII	Jun	10	2017	Section 6-3 (b) of the charter (TC must adopt within 45 days of receiving budget)		
Fri	Jun		2017	Unless otherwise provided for in the vote of Town Council <u>or</u> encumbered by <u>contractual</u>		
"	Juli		2017	obligation, balances of Specific appropriations authorized <u>during & before FY 2015</u>		
				revert to the General Fund (General appropriations expire at close of FY18)		
L				revent to the General Fund (General appropriations expire at Close of Fillo)		



