CAPITAL IMPROVEMENTS PROGRAM, PROJECT PROPOSALS

FY - 2018/2019 - 2022/2023

1. Project				2. Department			
	Road Improvem				HIGHWAY		
3. Project Backg	round, Purpose	and Objectiv	/es				_
Improvement to	wastal was de-						
Improvement to		المعتابية المعتا	minad	and base			
Purchase of mate	riais sucii as gr	avei, cuivert	pipe, seea,	and nay.			
Rental of excava	ting machines						
	g maomico						
	· · ·	Projected	Es	timated Exp	enditures by	/ Fiscal Year	
4. Project Costs		Schedule		The state of the s	orialital co b	Tiscai Teal	
&			FY	FY	FY	FY	FY
Schedule		1	2019	2020	2021	2022	2023
A: Planning & Eng	gineering						
B. Land & Row			ł	1	i		
C. Construction			62,000	62,000	62,000	62,000	62,000
D. Equipment Pur	chase						,
E. Interest Costs]					
F. Other Costs							
5. Proposed Finar	_						
	General Fund	\$_	100	_		%	
	Water Fund	\$_		_		%	
	Sewer Fund	\$_		_		%	
	Federal Aid	\$_		_		%	
	State Aid	\$_		_		%	
	Other - Equip.	\$_		_		%	
Held on Reserve:	19,900						

CAPITAL IMPROVEMENTS PROGRAM, PROJECT PROPOSALS

FY - 2018/2019 - 2022/2023

1. Project Greek Road Realignment			2. Department					
3 Project Backet	3. Project Background, Purpose and Objectives			HIGHWAY				
5. Project backy	round, Purpose	and Objectiv	/es					
Realignment of 8,	320 feet of the c	aravel eectio	n of Crook B	Pond				
Shift the road eas					arian buffer	haturaan Cu	a ala Da a al	
and Otter Creek.	ot within or near	the existing	ROW to res	store the rip	arian bumer	between Cre	ек коаа	
and Otter Creek.								
		Projected	Fe	timated Evi	penditures by	Fiscal Voa		
4. Project Costs		Schedule	Lo	timated Ex	Jenaitai es bi	riscai rea		
&		Concadio	FY	FY	FY	FY	FY	
Schedule		İ	2019	2020	2021	2022	2023	
A: Planning & Eng	lineering		100,000	2020	2021	ZUZZ	2023	
B. Land & Row	,9		50,000					
C. Construction			00,000	1,050,000				
D. Equipment Pure	chase			1,000,000				
E. Interest Costs]			
Other Costs								
5. Proposed Finan	cina:							
	General Fund	\$				%		
	Water Fund	\$	-			%		
	Sewer Fund	\$				%		
	Federal Aid	\$				%	l	
	State Aid	\$				%		
	Other - Equip.	\$				%		
	Bond	\$	1,200,000		Annual Bon		94.028 53	
Held on Reserve:		*	.,			ayo 4	- 1,020.00	

CAPITAL IMPROVEMENTS PROGRAM, PROJECT PROPOSALS

FY - 2018/2019 - 2022/2023

1. Project	Project				2. Department			
SIDEWALK PROGRAM	ı		HIGHWAY					
3. Project Background, Purpose		res	.1.		·-			
	-							
Continuation of sidewalk replac	ements.							
		Length (ft)						
Charles Avenue, along school p	arking lots	1,200	Committed	to Charles A	Ave Street Pr	oject.		
9 Court St		10						
11 Court St		30						
31 Court St		150						
34 Court St (Fairpoint)		65						
75-77 Court St		65						
101 Court St		30						
91 Franklin St		190						
48-50 N. Pleasant St		30						
52 N. Pleasant St		30						
56-58 N. Pleasant St		35						
1								
	Projected	Es	timated Expe	enditures by	/ Fiscal Year			
4. Project Costs	Schedule							
8.		FY	FY	FY	FY	FY		
Schedule		2019	2020	2021	2022	2023		
A: Planning & Engineering								
B. Land & Row						İ		
C. Construction		65000	70000	75000	75000	80000		
D. Equipment Purchase			ĺ					
E. Interest Costs								
F. Other Costs								
5. Proposed Financing:								
General Fund	d \$	65,000		100	%			
Water Fund	\$		-		%			
Sewer Fund	\$		-		%			
Federal Aid	\$		_		%			
State Aid	\$		5		%	ŀ		
Other - Equip	•		-		%			
			_					
Held on Reserve: \$96,000)		_					

Exchange Street Grant Award & Proposal Summary with Local Match 10/6/2017

		Bike & Ped	T		
i	Project Cost	•	Town Share		
		90%	6 109	6 Source of	Town Funding
Exchange Street Segments 1 & 2 - 1st Grant Elm St - Champlain Valley P & H SIDEWALK ONLY - 2013	\$ 330,000	\$ 297,000	\$ 33,000	(\$16K in FY15	ital Budget Reserve 5 & \$16K in FY16) tal Budget in FY18
Segment 3 - 2nd Grant Sidewalk - Champlain Valley P & H to Catamount Park - 2015	\$ 378,000	\$ 340,200	\$ 37,800		900 in Capital Budget 3 and FY19
Segment 4 - Proposed Application Catamount Park Shared Use Path to Route 7	\$ 990,696 Preliminary Estimate - Number to be confirmed				
	Project Cost	State Share	Town Share		
Totals from Above	\$ 1,698,696	\$ 637,200.00	\$ 70,800.00	*	

Capital Improvement Fund

FY15	\$ 16,000	Appropriated
FY16	\$ 16,000	Appropriated
FY17	\$ 2	2
FY18	\$ 19,900	Appropriated
FY19	\$ 18,900	Proposed in First Draft CIP
FY20	\$ 12	
Total	\$ 70,800	*

^{*}All project costs are estimates based on the current unit costs of constructing sidewalks and shared use paths as provided by the Vermont Agency of Transportation. Project costs will vary based on actual bids received.

CAPITAL IMPROVEMENTS PROGRAM, PROJECT PROPOSALS

FY - 2018/2019 - 2022/2023

1. Project	<u>.</u>			2. Departme	ent			
	Highway Cons	struction		HIGHWAY				
3. Project Backgro			es		1			
Shard Villa Road -	River bank sta Estimated cos				ecycling an	d paving of	2,720 feet;	
Charles Avenue -	Project includ Water main &	roject begins at the school stop sign and runs north towards Water Street. roject includes stormwater & curbing improvements, road recyling & paving later main & Sewer main are included in the project but their costs are not a part of is funding. Estimated cost \$242,862. (\$226,048 on reserve).						
Rogers Road -	The water mai disconnected	ad recycling and paving from Birchard Park to Monroe Street. e water main and sanitary main were improved a few years ago. Sump pumps were connected from the sanitary. timated cost is \$65,000.						
Cady Road:	dy Road: Begin culvert(s) replacement process. Two culverts need to be replaced before the road surface can be recycled. These require a hydraulic study and stream alteration permits. One of them may qualify for a State Culvert Grant. The future road project can qualify for a Class II Paving Grant. Initial funding request is \$93,686.							
		Projected	Est	timated Exp	enditures by	/ Fiscal Year		
4. Project Costs		Schedule					_	
&			FY	FY	FY	FY	FY	
Schedule			2019	2020	2021	2022	2023	
A: Planning & Engi	neering							
C. Construction			342,500	346,901	351,714	357,003	362,241	
D. Equipment Purcl	hase		342,300	340,901	351,714	357,003	302,241	
E. Interest Costs	11450							
F. Other Costs								
5. Proposed Financ	ing:				L			
	General Fund	\$				%		
	Water Fund	\$		_		%		
	Sewer Fund	\$				%		
	Federal Aid	\$_		_		%		
	State Aid	\$_		_		%		
	Other - Equip.	\$_	_	_		%		
Held on Reserve:	\$ 296,048							

CAPITAL IMPROVEMENTS PROGRAM, PROJECT PROPOSALS

FY - 2018/2019 - 2022/2023

1. Project 2011 Bond for Projects	Project 2011 Bond for Projects			2. Department HIGHWAY			
3. Project Background, Purpose	and Objectiv	res					
Annual payment of Principal and	Interest for t	he \$3 millic	on bond from	2011			
Amidai payment of i inicipal and	interest for t	ne po minic	on bond non	12011.			
-	Projected	F	etimated Evi	anditures h	y Fiscal Yea	P.	
4. Project Costs	Schedule		Stilliated Ex	Jenuitures L	y riscai i ea		
&	Joshiodalo	FY	FY	FY	FY	FY	
Schedule		2019	2020	2021	2022	2023	
A: Planning & Engineering							
B. Land & Row							
C. Construction				ĺ	ł		
D. Equipment Purchase							
E. Interest Costs		230,503	226,102	221,289	216,160	210,762	
F. Other Costs							
5. Proposed Financing:							
General Fund	\$		· -		%		
Water Fund	\$		_		%		
Sewer Fund	\$.		_		%		
Federal Aid	\$.		_		%		
State Aid	\$.		_		%		
Other - Equip.	\$.		_		%		
Held on Reserve:							

CAPITAL IMPROVEMENTS PROGRAM, PROJECT PROPOSALS

FY - 2018/2019 - 2022/2023

1. Project		pipe replacem o Swanage Ct	ent	2. Department HIG		HIGHWAY	
3. Project Backgro							
3. Project backgr	ouna, Purpose	and Objectives	5				
Replace 180 feet o	of 24-inch storm	sewer pipe be	etween these	e two street:	s. Existing 2	4-inch pipe	clogs with
tree roots.					_		_
		Projected	Est	timated Exp	enditures by	/ Fiscal Year	
4. Project Costs		Schedule				İ	
&		1	FY	FY	FY	FY	FY
Schedule			2019	· 2020	2021	2022	2023
A: Planning & Engi	ineering	winter '17-18	2,000	- 1			
B. Land & Row						i	
C. Construction		summer '18	23,000	i			
D. Equipment Purc	hase					ľ	
E. Interest Costs							
F. Other Costs							
5. Proposed Finance	•						
	General Fund	\$_				%	
	Water Fund	\$.				%	
	Sewer Fund	\$_		-		%	
	Federal Aid	\$_				%	i
	State Aid	\$_		2		%	
	Other - Equip.	\$_				%	
Held on Reserve:							

CAPITAL IMPROVEMENTS PROGRAM, PROJECT PROPOSALS

FY - 2018/2019 - 2022/2023

1. Project	. Project				2. Department			
	reet- Charles &			HIGHWAY				
3. Project Backgr	ound, Purpose	and Objectiv	/es					
Begin the project	to re-align the i	ntersection o	of Charles Av	e and Monr	oe Street wi	th Court Str	eet.	
A study has been	completed and	presented to	the commu	nity. The co	mmunity su	pports the r	e-alignment	
to a "X" intersection	on with traffic c	ontrol signa	ls at each leg	g of the inte	rsection.			
l								
This request is for								
and for set-aside f			lany Federal	or State fur	nding assist	ance progra	ıms do not	
participate in land	acquisition cos	sts.						
		Projected	Est	imated Exp	enditures by	Fiscal Year	r	
4. Project Costs		Schedule		· ·	Í			
&			FY	FY	FY	FY	FY	
Schedule			2019	2020	2021	2022	2023	
A: Planning & Engi	ineering		50,000	100,000				
B. Land & Row			150,000	100,000	J			
C. Construction				1	870,000			
D. Equipment Purc	hase							
E. Interest Costs			1	ĺ			ĺ	
F. Other Costs	Contingency				100,000			
5. Proposed Finance	cing:		-					
	General Fund	\$	200,000		100	%		
	Water Fund	\$		_		%		
	Sewer Fund	\$		_		%		
	Federal Aid	\$	".	_		%		
	State Aid	\$		_		%	l	
	Other - Equip.	\$				%		
				_			[
Held on Reserve:								





As shown in the above table, the results of the signalized intersection of Court Street/Charles Avenue/Monroe Street show good levels of service with LOS C or better under the three peak hour conditions under Alternative 3.

6.4 Alternatives Evaluation Matrix

The matrix below provides an objective evaluation of the No Build and three Build alternatives evaluated for the Court/Charles/Monroe Intersection study area. Alternative 1, which replaces the signal at the Court Street/Charles Avenue intersection with a roundabout, is the lowest cost Build alternative. However, Alternative 1 only moderately improves traffic flow and bicycle and pedestrian accessibility and also has significant right-of-way and historic resource impacts.

Both Alternatives 2 and 3 realign Charles Avenue to intersect Court Street across from Monroe Street. Although the overall configuration and construction cost for both alternatives are similar, Alternative 3 has less right-of-way impact than Alternative 2, has better traffic performance, and has less historic district impacts than Alternative 2.

Table 7: Alternatives Evaluation Matrix

	No Build	Alt 1 Charles Roundabout	Alt 2 Monroe Roundabout	Alt 3 Monroe Signal	
COST: Design & Construction	\$0	\$350,000	\$980,000	\$870,000	
COST: Right-of-Way	\$0	Lowest (partial impacts to 1 property)	Highest lacquisition plus partial impacts to 1 property)	Middle (acquisition)	
CONGESTION: Avg. Level of Service	LOS F	LOS D/E	LOS D	LOS A	
BIKE/PED: Accessibility & Safety	No Change	Slight Increase (Two intersections)	Increase (Single intersection)	Increase (Single intersection)	
SAFETY: Anticipated Effects	No Change	Slight Decrease	Improvement (single intersection; roundabout)	Improvement (single intersection; signal)	
IMPACTS: Historic Properties	None	Significant (Historic District)	Significant Historic District)	Moderate	
MPACTS: Hazardous Materials	None	None	Yes (Fuel Tanks)	Yes (Fuel Tanks)	



7.0 Preferred Alternative

The intersection alternatives and alternatives evaluation assessment was presented to the Middlebury Selectboard on January 12, 2016. Following a discussion of the alternatives, the Selectboard approved the four-way signalized intersection design, **Alternative #3**, as the preferred alternative, with seven votes in favor and none opposed. The meeting agenda, meeting minutes, and presentation can be found in Appendix A.

CAPITAL IMPROVEMENTS PROGRAM, PROJECT PROPOSALS

FY - 2018/2019 - 2022/2023

1. Project Stormw	Project Stormwater Grant Match			2. Department			
Eco-Sys	tem Restoration	n Project		Highway			
3. Project Backgr	ound, Purpose	and Objectiv	es				
Construction of the Seminary Street. The Downtown Streets in close phasin. Since these package these as	ormwater Maste proximity. They e are relativley s one project.	er Plan prepa are: Seminar small project	red by Wate y East Basir s and they d	rshed Cons n, Seminary lo operate a	sulting Asso West Basin as a system,	ciates ident , and Northe it might be	ified three east Corner best to
Initial cost estimat	te (by the consu	ltant) in 2016	was \$52,30	0 for const	ruction. The	State's stor	mwater sec
has estimated that	t small projects	can run 50%	to 100% ab	ove estimat	tes.		
		Projected	Estimated Expenditures by Fiscal Year				
4. Project Costs		Schedule					
&			FY	FY	FY	FY	FY
Schedule			2019	2020	2021	2022	2023
A: Planning & Eng	ineering		8,000				
B. Land & Row C. Construction D. Equipment Purc E. Interest Costs F. Other Costs	hase	Summer '18	80,000				
5. Proposed Finan	cing:	-					
	General Fund Water Fund Sewer Fund Federal Aid State Aid Other - Equip.	\$ - \$ - \$ - \$ - \$ -	66,000		75	% % %	

6. Comments:

Held on Reserve:

CAPITAL IMPROVEMENTS PROGRAM, PROJECT PROPOSALS

FY - 2018/2019 - 2022/2023

1. Project				2. Departme	ent		
	ROGRAM			,	HIGHWAY		
3. Project Backgi	round, Purpose	and Objectiv	/es	·			
Purchase and ins	tallation of new	trees in the	Town's ROW	<i>1</i> .			
Tree Committee n	nakes recomme	ndation of lo	cations.				
		Projected	Ent	imated Eve	malihuwa a la	· Figure 1 Voca	
4. Project Costs		Schedule	EST	imated Expe	enaitures by	Fiscal Year	
&		Concadio	FY	FY	FY	FY	FY
Schedule			2019	2020	2021	2022	2023
A: Planning & Eng	ineering				-		
B. Land & Row		J i	J				
C. Construction			5700	5700	5700	5700	5700
D. Equipment Purc	chase		1				
E. Interest Costs				ļ	J		ľ
F. Other Costs							
5. Proposed Finan	-	•	F 700		400	0.7	
	General Fund Water Fund	\$	5,700	_	100		
		\$		_		%	
	Sewer Fund	\$		_		%	
	Federal Aid State Aid	\$.		_		%	
	Other - Equip.	\$ _.		_		%	
	Other - Equip.	Ψ.		-		%	i
Held on Reserve:							

General Fund Capital Improvement Bud	proveme	ent Budge	get 2019						
	Quantity	Cost	Life Cycle	Total Inventory Cost	FY 2019	FY 2020	FY 2021	FY 2022	Totol
Thermal Image Camera Replacement	o	\$8,500.00	8 Years	\$51,000.00	\$6.500.00	\$6.500.00	1%	\$6 565 00	¢26 120 00
Four Gas Meter Replacement	4	\$1,050.00	5 Years	\$4,200.00	\$840.00	\$840.00	\$48-	\$45	\$3.296.80
Single Gas Meter Replacement	ю	\$425.00	7 Years	\$1,250.00	\$182.15	\$182.15	\$183.98	\$183.98	\$732.26
Fire Fighting Gear Replacement (Helmet , Pants , Coat , Boots)	09	\$2,500.00	10 Years	\$150,000.00	\$15,000.00	\$15,000.00	\$15,150.00	\$15,150.00	\$60,300.00
Air Pack Replacement	33	\$6,000.00	12 Years	\$198,000.00	\$16,500.00	\$16,500.00	\$16,665.00	\$16,665.00	\$66,330.00
Mobile Radio Repeater	2	\$6,500.00	15 Years	\$13,000.00	\$866.00	\$866.00	\$874.66	\$874.66	\$3,481.32
Station Repeater	П	\$25,000.00	20 Years	\$25,000.00	\$1,250.00	\$1,250.00	\$1,262.50	\$1,262.50	\$5,025.00
Mobile Radio	18	\$3,800.00	18 Years	\$68,400.00	\$3,800.00	\$3,800.00	\$3,838.00	\$3,838.00	\$15,276.00
Portable Radio	31	\$4,200.00	15 Years	\$130,200.00	\$8,680.00	\$8,680.00	\$8,766.80	\$8,766.80	\$34,893.60
Tot	Totals			\$641,050.00	\$53,618.15	\$53,618.15	\$54,114.34	\$54,114.34	\$215,464.98

			MFD Thermal Imaging Cameras	maging Ca	meras	
12132016DPS / 08302017DPS						
Account: 05-5-1619-6.100						
-						
Equipment - Thermal Imaging	Quantity	Year Acquired	Replacement Cycle	Condition	Target Date	Estimated Cost
			Target Life		Of Replacement	of Replacement
			Expectancy			
					,	
MSA Evolution 6000 Thermal Imaging Camera	1	2016	7 - 10 Years	Good	2023	\$8,500.00
MSA Evolution 6000 Thermal Imaging Camera	2	2017	7 - 10 Years	Good	2024	\$8,500.00
MSA Evolution 6000 Thermal Imaging Camera	1	2014	7 - 10 Years	Good	2021	\$8,500.00
MSA Evolution 5600 Thermal Imaging Camera	1	2010	7 - 10 Years	Good	2017	\$8,500.00
MSA Evolution 5600 Thermal Imaging Camera	1	2009	7 - 10 Years	Fair	2016	\$8,500.00

	MFD Meter Inventory	- Inventory			
12132016DPS / 08302017DPS					
Account Number: 05-5-1618-6.100					
Equipment - Gas Meters	Year Acquired	Replacement Cycle	Condition	Target Date	Estimated Cost
		Target Life		Of Replacement	of Replacement
		Expectancy			
MSA Altair 4 gas meter	2014			2019	\$1,050.00
MSA Altair 4 gas meter	2014	5 Years	Good	2019	\$1,050.00
MSA Altair 4 gas meter	2013	5 Years		2018	
MSA Altair 4 gas meter	2014	5 Years	Good	2019	\$1,050.00
MSA Altair Single gas meter Ammonia NH3	2010	5 - 7 Years	Fair	2015	\$425.00
MSA Altair Single gas meter Ammonia NH3	2015	5 - 7 Years	Good		
MSA Altair Single gas meter	2011	5 - 7 Years	Fair	2016	\$425.00
Hydrogen Cyanide HCN					9
					:

				Protective Clothing	Clothing			12/16 DPS
Account Number: 05-5-1615-6.100								08/17 DPS
Equipment - Helmets	Quantity	Removed	Quantity	Year Acquired	Replacement Cycle	Condition	Target Date	Estimated Cost
1	2016		2017		Target Life		Of Replacement	of Replacement
					Expectancy			
Cairnes Metro 660 C	3	3	0	2000	2010	Poor	2010	00 9525
Cairnes Metro 660 C	7		7	2001				
Cairnes Metro 660 C	0		0	2002				
Cairnes Metro 660 C	30	4	26	2003	2013			
Cairnes Metro 660 C	1		1	2004	2014	Poor		
Cairnes Metro 660 C	0		0	2005	2015	Poor	2015	
Cairnes Metro 660 C	8	3	5	2006		Poor		
Cairnes Metro 660 C	0		0	2007		Poor	2017	\$256.00
Cairnes Metro 660 C	1		1	2008		Poor	2018	
Cairnes Metro 660 C	0		0	2009		Fair	2019	
Cairnes Metro 660 C	1		H	2010	2020	Fair	2020	
Cairnes Metro 660 C	1		1	2011		Fair	2021	
Cairnes Metro 660 C	0		0	2012	2022	Good		
Cairnes Metro 660 C			1	2013	2023	Good	2023	
Cairnes Metro 660 C	1		1	2014		Good	2024	\$256.00
Cairnes Metro 660 C	2		2	2015		Good	2025	\$256.00
Cairnes Metro 660 C	0		0	2016	2026			
Cairnes 1044 Traditional 1044BS-G			12	2017	2027	New	2027	\$256.00

		Prot	Protective Clothing	lothing			12/16 DPS
Account Number: 05-5-1615-6.100							08/17 DPS
Equipment - Bunker Pants	Quantity Removed	≩	Year Acquired R	Replacement Cycle	Condition	Target Date	Estimated Cost
	2016	2017	ř	Target Life		Of Replacement	of Replacement
			üΙ.	Expectancy			
Bunker Pants Globe G-Xtreme 42782ESK	3	m	2000	2010	Poor	0100	00 0025
Bunker Pants Globe G-Xtreme 42782ESK	2	2	2001	2011		2010	
Bunker Pants Globe G-Xtreme 42782ESK	0	0	2002	2012			
Bunker Pants Globe G-Xtreme 42782ESK	5 1	4	2003	2013			
Bunker Pants Globe G-Xtreme 42782ESK	6 1	5	2004	2014		2014	
Bunker Pants Globe G-Xtreme 42782ESK	4 2	2	2005	2015	Poor	2015	
Bunker Pants Globe G-Xtreme 42782ESK	4	4	2006	2016	Poor	2016	
Bunker Pants Globe G-Xtreme 42782ESK	5	5	2007	2017		2017	
Bunker Pants Globe G-Xtreme 42782ESK	1	1	2008	2018	3 Fair	2018	\$700.00
Bunker Pants Globe G-Xtreme 42782ESK	2 1	П	2009	2019) Fair	2019	
Bunker Pants Globe G-Xtreme 42782ESK	2	2	2010	2020		2020	
Bunker Pants Globe G-Xtreme 42782ESK	8	8	2011	2021	Poo9 1		
Bunker Pants Globe G-Xtreme 42782ESK	1	1	2012	2022	Good	2022	
Bunker Pants Globe G-Xtreme 42782ESK	8	8	2013	2023	Good		
Bunker Pants Globe G-Xtreme 42782ESK	0	0	2014	2024	t Good		
Bunker Pants Globe G-Xtreme 42782ESK	8	∞	2015	2025	Good		
Bunker Pants Globe G-Xtreme 42782ESK	5	2	2016	2026	5 Good	2026	
Bunker Pants Globe G-Xtreme 42782ESK		2	2018	2028	New New	2028	
				•			
			-				

				Protective Clothing	Clothing			12/16 DPS
								08/16 DPS
Account Number: 05-5-1615-6.100								
	j							
Equipment - Bunker Coat	Quantity	Removed	2	Year Acquired	Replacement Cycle	Condition	Target Date	Estimated Cost
	2016		2017		Target Life		Of Replacement	of Replacement
					Expectancy			
Bunker Coat Globe G-Xtreme 32782ESK	4		4	2000	2010	Poor	2010	\$1,050.00
Bunker Coat Globe G-Xtreme 32782ESK	0		0	2001	2011	Poor		
Bunker Coat Globe G-Xtreme 32782ESK	0		0	2002	i	Poor		
Bunker Coat Globe G-Xtreme 32782ESK	5	1	4	2003	2013	Poor		
Bunker Coat Globe G-Xtreme 32782ESK	4	3	₩	2004	2014	Poor		
Bunker Coat Globe G-Xtreme 32782ESK	4	1	m	2005		Poor		
Bunker Coat Globe G-Xtreme 32782ESK	1		T	2006		Poor		
Bunker Coat Globe G-Xtreme 32782ESK	4		4	2007		Fair		
Bunker Coat Globe G-Xtreme 32782ESK	4		4	2008		Fair		
Bunker Coat Globe G-Xtreme 32782ESK	1		1	2009		Fair		
Bunker Coat Globe G-Xtreme 32782ESK	1		1	2010		Fair		
Bunker Coat Globe G-Xtreme 32782ESK	∞		80	2011		Good		
Bunker Coat Globe G-Xtreme 32782ESK	1		1	2012	2022	Good		
Bunker Coat Globe G-Xtreme 32782ESK	6		6	2013		Good		
Bunker Coat Globe G-Xtreme 32782ESK	0		0	2014		рооб		
Bunker Coat Globe G-Xtreme 32782ESK	10		10	2015		9009	2025	
Bunker Coat Globe G-Xtreme 32782ESK	2		5	2016	2026	Good		
Bunker Coat Globe G-Xtreme 32782ESK			5	2018	2028	New		
						İ		

				Protective Clothing	Clothing			12/16 DPS
Account Number: 05-5-1615-6.100								08/17 DPS
Equipment - Boots	Quantity	Replaced	Quantity	Year Acquired	Replacement Cycle	Condition	Target Date	Estimated Cost
	2016		2017		Target Life		Of Replacement	of Replacement
					Expectancy			
Globe Supreme 14" Pull On 1201400-14	2	1	1	2000	2010	Poor	2010	\$450.00
Globe Supreme 14" Pull On 1201400-14	Н		1	2001	2011			
Globe Supreme 14" Pull On 1201400-14	1		1	2002	2012			
Globe Supreme 14" Pull On 1201400-14	11	4	7	2003	2013		2013	
Globe Supreme 14" Pull On 1201400-14	0		0	2004	2014			
Globe Supreme 14" Pull On 1201400-14	1	1	0	2005	2015			
Globe Supreme 14" Pull On 1201400-14	1	1	0	2006	2016			\$450.00
Globe Supreme 14" Pull On 1201400-14	7		7	2007	2017		7107	
Globe Supreme 14" Pull On 1201400-14	9		9	2008	2018			
Globe Supreme 14" Pull On 1201400-14	1		П	2009	2019			CAE0 00
Globe Supreme 14" Pull On 1201400-14	4		4	2010	2020	9		
Globe Supreme 14" Pull On 1201400-14	0		0	2011	2021			
Globe Supreme 14" Pull On 1201400-14	4		4	2012	2022			
Globe Supreme 14" Pull On 1201400-14	1			2013	2022			
Globe Supreme 14" Pull On 1201400-14	2		1	2010	7000			
Globe Supreme 14" Pull On 1201400-14	9		1 4	2017	202 200c			
Globe Supreme 14" Pull On 1201400-14	1		-	2016	2022		2025	
Globe Supreme 14" Pull On 1201400-14			7	2017	7002			
								3450.00
								_

arget Date Estimate of Replacement of Replacement 2013 2013 2015 2024 2025 2026 2026 2026 2026 2026 2032 \$\$\$\$2032 \$	Account Number: 05-5-1626-6.100		Self Contai	Self Contained Breathing Apparatus	Apparatu	S	12/16 DPS
Quantity Year Acquired Replacement Cycle Condition Target Date Estimate 1 2001 8-12 Vears Good 2013 2 2003 8-12 Vears Good 2015 9 2004 8-12 Vears Good 2016 1 2004 8-12 Vears Good 2026 8 2014 8-12 Vears Good 2026 7 2014 8-12 Vears Good 2026 8 2014 8-12 Vears Good 2026 1 2014 8-12 Vears Good 2026 3 2004 12-15 Vears Good 2019 9 1 2017 12-15 Vears Good 2032 9 1 2017 12-15 Vears Good 2032 9							09/17 DPS
Quantity Year Acquired Replacement Cycle Condition Target Date Estimate 1 2001 8-12 Years Good 2013 2 2003 8-12 Years Good 2015 9 2004 8-12 Years Good 2016 8 2014 8-12 Years Good 2024 7 2014 8-12 Years Good 2025 8 2014 8-12 Years Good 2026 1 2014 8-12 Years Good 2026 3 2004 8-12 Years Good 2026 1 2017 12-15 Years Good 2019 9 1 2017 12-15 Years Good 2019 9 1 2017 12-15 Years Good 2032 9							
Target Life	Equipment - Self Contained Breathing Apparatus	Quantity	Year Acquired	Replacement Cycle	Condition	Target Date	Estimated Cost
Expectancy Exp				Target Life		Of Replacement	of Replacement
1 2001 8-12 Years Good 2013 2 2003 8-12 Years Good 2015 5 2004 8-12 Years Good 2016 5 2012 8-12 Years Good 2016 7 2014 8-12 Years Good 2025 7 2014 8-12 Years Good 2026 3 2004 12-15 Years Good 2032 1 2004 12-15 Years Good 2032 9 2004 12-15 Years Good 2032 9 2004 12-15 Years Good 2032 9 2004 12-15 Years Good 2032				Expectancy			
2 2003 8-12 Years Good 2015 2004 8-12 Years Good 2016 5 2012 8-12 Years Good 2016 2014 8-12 Years Good 2024 7 2014 8-12 Years Good 2025 7 2014 8-12 Years Good 2026 2015 3 2004 12-15 Years Good 2032 1 2017 12-15 Years Good 2032 \$\frac{\pi}{2}\$	MSA AP-50-2216 PSI Self Contained Breathing Apparatus					2012	
9 2004 8-12 Years Good 2016 5 2012 8-12 Years Good 2024 8 2014 8-12 Years Good 2025 7 2014 8-12 Years Good 2025 7 2014 8-12 Years Good 2026 3 2004 12-15 Years Good 2032 9 1 2017 12-15 Years Good 2032 9 1 2017 12-15 Years Good 2032 9	MSA AP 50 2216 PSI Self Contained Breathing Apparatus	2				2015	
5 2012 8-12 Years Good 2024 8 2014 8-12 Years Good 2022 7 2014 8-12 Years Good 2026 3 2004 12-15 Years Good 2019 9 1 2017 12-15 Years Good 2032 9	MSA AP 50 2216 PSI Self Contained Breathing Apparatus	55					
2013	MSA AP-75 4500 PSI Self Contained Breathing Apparatus	2					
8 2014 8-12 Years Good 2022 7 2014 8-12 Years Good 2026 3 2004 12-15 Years Good 2019 5 1 2017 12-15 Years Good 2032 5	MSA AP 75 4500 PSI Self Contained Breathing Apparatus					2025	
3 2004 12-15 Years Good 2019 5 1 2017 12-15 Years Good 2019 5 1 2017 12-15 Years Good 2032 5	Breathing Apparatus Updated				Poog	2002	
3 2004 12-15 Years Good 2019 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	MSA AP-75 4500 PSI Self Contained Breathing Apparatus	7			poog	3000	
3 2004 12-15 Years Good 2019 1 2017 12-15 Years Good 2032 1 2019 12-15 Years Good 2032						2028	
1 2017 12-13 Years Good 2019 2014 12-15 Years Good 2019 2015 2015 2015 2015 2015 2015 2015 2015	MSA Rit Pack						
1 2017 12-15 Years Good 2032	MSA Rit Pack	7			goog	2019	\$2,800.00
	יינים ווירן מכונ			12-15 Years	Good	2032	
		+					

Equipment - Repeater Quantity Year Acquired Rej 12132016DPS Exp Account Number Motorola CDR-700 1 2003 Trunk Mounted Utlity # 1 Motorola CDR-700 1 1994 Chipman Hill Main 1994 Chipman Hill Main			Radio Inventory - Repeater	Repeater			12/16 DPS
Quantity Year Acquired 1 2003 1 2005 1 1994 1 1994							
1 2003		uantity		Replacement Cycle	Condition	Target Date	Estimated Cost
1 2003	SUDS			Target Life		Of Replacement	of Replacement
	Number			Expectancy			
	a CDR-700	1	2003	77007		0.00	
	ounted Utlity # 1			to years	٦٩	2018	6,500.00
7-1	a CDR-700	1	2005	15 vears	Fair	0000	\$ 500,000
7-1	Station # 1					0101	}
T-1							
Chipman Hill Main	MTR 2000	1	1994	20 vears	Poor	2014	35,000,00
	Hill Main					107	,

		Radio Inventory - Mohile	Mobile			
						12/16 DPS
	:					
Equipment - Mobile Radios	Quantity	Year Acquired	Replacement Cycle	Condition	Target Date	Estimated Cost
			Target Life		Of Replacement	of Replacement
12132016DPS			Expectancy			
Account Number						
Tanker # 1 - CDM 1250	1	2008	10-12 Years	Fair	2018	\$3 800 00
Engine # 1 - CDM 1250	7	2007			2017	
Engine # 2 - CDM 1250	1	2007	10-12 Years		2017	\$3.800.00
Engine # 3 - CDM 1250		2006			2016	
Utility # 1 - CDM 1250	T	2003				
Utility # 2 - CDM 1250	-	2011				
Ladder # 1 - CDM 1250	-		10-12 Years	Fair	2017	\$3,800.00
Brush # 1 - CDM 1250	-1	2011	10-12 Years	9		\$3,800.00
Utlity # 1 Rack CM 300	3	2003	10-12 Years	Poor	2013	\$3,800.00
Support # 1	0					
Three Chiefs	3	2008	10-12 Years	Fair	2018	\$3,800,00
Station One	4	2008	10-12 Years		2018	\$3,800.00
	18					
						-

		Radio Inver	Radio Inventory - Portable			12/16 DPS
						09/17 DPS
Equipment - Portable Radios	Quantity	Year Acquired	Replacement Cycle	Condition	Target Date	Estimated Cost
			Target Life		Of Replacement	of Replacement
12132016DPS / 08302017DPS			Expectancy			
Account Number						
Motorola - HT - 750	2	2000	5 - 7 Years	Poor	2007	\$4.200.00
Motorola - HT - 750	9	2002	5 - 7 Years	Poor	2009	\$4,200.00
Motorola - HT - 750	∞	2003	5 - 7 Years	Poor	2010	\$4,200.00
Motorola - HT - 750	4	2007	5 - 7 Years	Poor	2014	\$4,200.00
Motorola - HT - 1250	11	2012	5 - 7 Years	Good	2019	\$4,200.00
	31					

TO:

Kathleen Ramsey, Town Manager

FROM:

Chris Kirby and Tricia Allen, Ilsley Public Library

RE:

Proposed capital budget for FY 2018-2023

DATE:

August 31, 2017

The Ilsley Board of Trustees approves the following capital expenditure estimates and submits them to the town for consideration.

Total	\$5,000	\$5,000	\$5,000	\$6,000	\$6000
Info. Technology	\$5,000	\$5,000	\$6,000	\$6,000	\$6,000
	FY18-19	FY19-20	FY20-21	FY21-22	FY22-23

Notes on the budget request.

As the Library continues with its renovation/expansion planning, capital requests for items such as an upgraded boiler, elevator modernization, HVAC, front step lighting and other items have been removed from the library's five year projection for now. These and other needs will be addressed as part of the overall library building project.

Therefore, the only anticipated capital request known at this point is the ongoing request for information technology equipment – which includes staff and public computers, printers, servers, and various other expenses related to technology provision.

As the Library proceeds with its fundraising feasibility study in early 2018, a request for public funds to supplement private and grant fundraising for the expansion/renovation may be needed, but whether it will be needed and how much such a request might be is still uncertain at this stage.

Gossens Bachman Architects

Page 2

Library Boiler
\$230,000
See page 5 of
Ilsley Library
MEPF Systems Report

MECHANICAL, ELECTRICAL, PLUMBING AND FIRE PROTECTION SYSTEMS REPORT October 4, 2016 – DRAFT for Review

Applicable Code

- Codes applicable to the mechanical, plumbing, fire protection and electrical work on this project are the Codes adopted by the Town of Middlebury, Vermont as well as the Codes and Standards adopted and amended by the State of Vermont, which include, but are not limited to:
 - a. State of Vermont, 2015 Fire and Building Safety Code
 - b. IBC-2012, International Building Code, with State of Vermont amendments
 - c. NFPA 1-2015, Fire Code, with State of Vermont amendments
 - d. NFPA 101-2015, Life Safety Code, with State of Vermont amendments
 - i. Chapter 13 Existing Assembly Occupancies'
 - ii. Chapter 37 Existing Business Occupancies
 - e. NFPA 72-2016, National Fire Alarm Code, with State of Vermont amendments
 - f. NFPA 70-2014, National Electrical Code (NEC), with State of Vermont amendments
 - g. 2015 Commercial Building Energy Code (2015 CBES; "Energy Code")
 - h. IPC-2015, International Plumbing Code, with State of Vermont amendments
 - American Society of Mechanical Engineers (ASME)
 - j. Underwriters Laboratories (U.L.)
 - k. National Fire Protection Association (NFPA) sections 13, 30, 31,90A

Mechanical Systems

- 1. Existing Conditions
 - a. The Library is a four story granite and masonry block structure with an overall/floor area of 16,350 square feet.
 - b. The Boiler Plant consists of an oil fired Weil McLain cast iron sectional steam boiler with a heating output capacity of 770,000 BTUH. According to boiler inspection certificates the boiler was installed in 1997 and has been in operation for 19 years.
 - c. The steam boiler supplies steam to cast iron radiators and perimeter fin-tube radiation on the first and second floor levels. A condensate receiver and pump located in a Utility Room on the basement level returns condensate back to the boiler. A steam to water shell and tube heat exchanger located in the Boiler Room provides hot water heat to the basement level. Two zone circulators pump hot water to cabinet heaters, convectors and perimeter fin-tube radiation on this level.
 - d. A variety of programmable type thermostats are located throughout the facility.
 - e. Fuel oil is supplied from a below grade fuel oil storage tank located in the Community Garden area behind the building. The age and condition of the tank are unknown.
 - f. A wall mounted louver with motorized damper provides combustion air to the Boiler Room.
 - g. There is no central ventilation system for this facility. Bathrooms are provided with exhaust grilles ducted to exhaust fans. Ceiling paddle fans located in the Main Library

on the first floor level provide air movement in this space.

- 7
- h. A Carrier air handling unit located in the Boiler Room delivers ventilation air to the Meeting Room on the basement level. This unit has a DX cooling coil, however the refrigerant piping system has a leak and is not being used.
- i. When the addition was built in 1987 two air handling units were installed in the attic area. These units delivered ventilation and air conditioning to the Main Stack areas on first and second floors. These air handling units, connected ductwork and supply diffusers and return grilles have since been removed.
- j. Air conditioning is now provided by Fujitsu split DX systems consisting of wall mount interior units and exterior condensing units. There are approximately twelve interior units and eight exterior condensing units located around the building perimeter. Refrigerant piping is routed within line hide type enclosures to conceal and protect piping.

2. Code Deficiencies

- Because existing air handling units were removed the facility is not being ventilated in compliance with ASHRAE Standard 62.1 Ventilation for Acceptable Indoor Air Quality.
- b. The combustion air damper in the Boiler Room is undersized for the boiler input capacity.
- c. The Elevator Machine Room is not heated or ventilated.

3. Operational Deficiencies

- a. Comfort is an issue throughout the facility as many areas are not able to maintain acceptable heating or cooling temperatures.
- b. Lack of sufficient fresh air for ventilation leads to poor indoor air quality throughout the facility.
- c. Exhaust fans serving bathrooms did not appear to be functional.

4. Recommendations

- a. The existing heating system should be converted from steam to hydronic hot water. This conversion will improve heating system efficiency and allow better control of terminal heating equipment.
- b. The existing boiler has been in operation for almost 20 years. While a typical cast iron sectional boiler could function for 25 to 30 years it should be replaced as part of this renovation. Our recommendation is to provide two replacement boilers each sized for 60% of the peak heating load. Fuel costs and equipment efficiencies should be compared to evaluate if it is feasible to convert the fuel source from fuel oil to propane, or possibly natural gas when it is available. New boilers could be high efficiency, condensing type gas boilers similar to Triangle Tube Prestige model 399.
- c. The existing steam and condensate heating system is antiquated and should be replaced with a new hydronic hot water heating system. Existing steam radiators and unit heaters should be removed. It is anticipated that smaller office areas will be heated with perimeter fin-tube radiation, larger open areas such as Stack Areas and the Main Library will be heated with cabinet unit heaters. Heating equipment will be sized to allow the boilers to operate at 160 degrees F to improve system efficiency. New variable speed pumps with integral controls will be provided to allow pumps to respond to system heating demand. New pumps will be Grundfos Magnas or Wilo Stratus. New insulated hot water supply and return piping will be installed to supply new terminal heating

- equipment. Each space will be zoned with an individual control valve and thermostat with programmable temperature setback capability. Thermostats shall be configured to maintain a 5 degree F deadband between heating and cooling setpoints.
- d. The facility lacks ventilation air. Our recommendation is to install new dedicated outdoor air ventilation systems consisting of air-to-air heat recovery units (HRUs) that exchange exhaust air through a heat recovery core to pre-heat incoming fresh air. For this facility we anticipate two central heat recovery units will be required with the following capacities to serve these areas:
 - HRU-1: 1,700 cfm to serve the Basement and First Floor areas.

Page 4

- ii. HRU-2: 850 cfm to serve Second Floor greas.
- iii. Tempeff model RGSP with 90% efficiency ratings would be considered.
- e. The existing air handling unit in the Boiler Room is antiquated and will be removed. HRU-1 would be located in its place in the Boiler Room.
- f. HRU-2 will serve the Second Floor level. A mechanical space will need to be created within one of the existing rooms, or an insulated mechanical room could possibly be created in the attic area.
- g. New ductwork will be run through support and office areas to avoid running ductwork through main public areas. In some locations soffits may be created or ceilings lowered to conceal ducts. Duct riser locations will be determined for ductwork to run from the basement to first floor level. Any exposed ductwork will be round spiral wound with sidewall grilles and diffusers for a neat finished appearance.
- h. Hot water heating coils will be installed in the supply duct mains for each HRU. Demand control ventilation will be accomplished with space or duct mounted CO2 sensors that will vary the air flow rates from the HRUs to maintain space CO2 set points and indoor air quality.
- i. The existing air conditioning units are not performing adequately and are close to the end of their useful life. All interior AC units and exterior condensing units should be removed. Our recommendation is to provide new higher efficiency split system ductless air conditioning systems. Indoor units will be wall mounted similar to existing units. Exterior units will be located around the perimeter of the building. For this facility we anticipate approximately twelve 3 ton interior wall mounted units and matching three ton exterior condensing units will provide cooling needs for this facility. Exterior condensing units will be located along the back or side of the facility.
- j. The existing building temperature control system including thermostats and timeclocks is outdated and must be replaced with a new modern DDC system with computer programmed sequences and remote access through the internet. This control system will allow all recommended heating and cooling equipment to operate properly with programmable occupied/unoccupied schedules and heating & cooling temperature setpoints.
- k. The existing underground fuel oil tank should be replaced with a new underground storage tank with new tank monitoring system. The new tank would be a 1000 gallon steel double wall tank with U.L. listing and sti-P3 corrosion protection.
- 5. Estimated Mechanical Construction Costs

a. Recommendations:

i. Convert to Hot Water Heating System (including heating coils at HRUs)

**Estimated construction cost range: \$230,000 - \$250,000

- i. Provide Ventilation System with Heat Recovery Units

 Estimated construction cost range: \$60,000 \$70,000
- Provide Split System Air Conditioning Units
 Estimated construction cost range: \$100,000 \$120,000
- ii. Provide New DDC System

 Estimated construction cost range: \$40,000 \$50,000
- iii. Provide New 1000 Gallon Underground Fuel Oil Storage Tank

 Estimated construction cost range: \$20,000 \$25,000

Plumbing Systems

- 1. Existing Conditions
 - a. The domestic water main enters in the basement. Domestic water piping is copper and distributes throughout the building to bathroom lavatories and sinks. Plumbing fixtures appear to be outdated and should be replaced.
 - b. Domestic hot water is generated by two electric water heaters located at the basement level. One 20 gallon water heater is installed in the Boiler Room, and a second 50 gallon water heater is located in a Utility Room on the basement level. The water heater installed in the Utility Room is only five years old and can be retained, a thermostatic mixing valve is installed on this water heater. The age of the water heater in the Boiler Room is unknown, but appears to be older. There is no mixing valve installed on the water heater in the Boiler Room.
 - c. There is no hot water recirculation system installed in this facility.
 - d. Existing sanitary and vent piping is cast iron and appears to be in adequate condition.
 - e. There is an issue with an existing 3" sewer line that periodically backs up into the building. A camera of this line indicates tree roots may have penetrated the tile line.

2. Code Deficiencies

- a. Domestic hot water piping distance from fixture to hot water source exceeds the allowable distance listed in the Vermont Commercial Building Energy Standard. This affects lavatories in bathrooms.
- b. Domestic hot water piping is not insulated in accordance with current energy standards.
- c. A backflow preventer is not provided on the domestic water service to the building.
- 3. Operational Deficiencies



Town of Middlebury Capital Improvement Plan- Police FY2019-6 year Plan

FY24	\$20,000				\$5,000		\$25,000
FY23	\$8,000				\$5,000		\$13,000
FY22	000′8\$				\$5,000		\$13,000
FY21	\$19,000				\$5,000		\$29,000
EY20	\$8,000	\$5,000			\$5,000		\$18,000
FV19	\$8,000		\$5,000	\$3,000	\$5,000	\$6,000	\$27,000
FY18	\$7,000			\$3,000	\$5,000		\$15,000
CIP - CAIEGORY Police Department	INFORMATION & TECHNOLOGY Includes Security Update	Furniture	Garage Door- Sand Filter Bldg	Impound Lot Paving	HVAC Repair/Upgrade	H'Cap Doors	POLICE DEPARTMENT TOTALS
I.D.#	П	72	8	44 H	R	9	Pe

1. Project

TOWN OF MIDDLEBURY

CAPITAL IMPROVEMENTS PROGRAM, PROJECT PROPOSALS

FY - 2018/2019 - 2022/2023

1. Project				2. Department			
Information Management and Technology 3. Project Background, Purpose and Objectives				Police			
Maintain and upgra	ade capital inve	estments in t	technology -	information	manageme	nt and record	ds systems
in and around the							tems.
Annual upgrade/ re	∍placement of p	eripherals a	and periodic	replacemen	it of the serv	er	
		Projected	Est	imated Exp	enditures by	/ Fiscal Year	
4. Project Costs		Schedule					
&			FY	FY	FY	FY	FY
Schedule			2019	2020	2021	2022	2023
A: Planning & Engi	neering	ĺ	8,000.00	8,000.00	19,000.00	8,000	8,000
B. Land & Row							
C. Construction	_						
D. Equipment Purc	hase			ļ			
E. Interest Costs				ĺ			
F. Other Costs							
5. Proposed Financ	•						ì
	General Fund	\$	51,000	-	100		
	Water Fund	\$				%	ĺ
	Sewer Fund	\$		-		%	
	Federal Aid	\$		-		%	
	State Aid	\$	-	-		%]
	Other - Equip.	\$				%	
Held on Reserve:							ł

Information Management and Technology budget has been consolidated with the planning and budget for maintaining the recording systems in the building.

CAPITAL IMPROVEMENTS PROGRAM, PROJECT PROPOSALS

FY - 2018/2019 - FY 2022-2023

1. Project				2. Departme	ent		
Furniture Replacement				Police	_		
3. Project Background,	Purpose	and Objectiv	'es				
When the police departn		•					-
Most of the furnishings							
of well-used furnishings			of their usef	iul life. This	project pro	poses to rep	lace
old furniture (chairs) with							
12 Conference room and	l interviev	<u>w room chair</u>	<u>'s at \$3,000.</u>	5 desk cha	<u>irs at \$2,000</u>		
			_				
		Projected	Es	timated Exp	enditures by	/ Fiscal Yea	r
4. Project Costs		Schedule					
&			FY	FY	FY	FY	FY
Schedule			2019	2020	2021	2022	2023
A: Planning & Engineering	ng						
B. Land & Row							
C. Construction							
D. Equipment Purchase		1 1		5,000			
E. Interest Costs							
F. Other Costs							
5. Proposed Financing:							
	ral Fund	\$	5,000		100		
	r Fund	\$				%	
	r Fund	\$.				%	
	ral Aid	\$				%	
State		\$				%	ĺ
Other	r - Equip.	\$				%	
Held on Reserve:							

CAPITAL IMPROVEMENTS PROGRAM, PROJECT PROPOSALS

FY - 2018/2019 - 2022/2023

1. Project			2. Department			
Garage door replacemen			Police			
3. Project Background, Purpose	and Objective	es				
The existing garage door and re	ated frame ar	nd structures	s is dilapida	ted and dys	functional.	
The existing condition results in	animal and re	odent infesta	ation as wel	l as weather	r impingmen	it.
The building is used to store de	oartment vehi	cles and bul	k equipmen	t as well as	keeping veh	nicles out of
inclement and freezing weather	to avoid leavi	ng them run	ning to de-io	ce as well as	s getting the	em out of
the way for plowing. The propos	al is to replac	e the door a	nd hardwar	e with a stui	rdier door a	nd frame wit
an automatic opener.						
This proposal includes: Remova	l of the existing	ng door and	hardware; r	epair of the	door frame	and header;
installation of a new door and el	ectric opener	installation	of electrica	I power to o	perate the d	oor.
The door is a 20'2" X 8" non-sta	ndard door.					
						ļ
	Projected	Es	timated Exp	enditures b	y Fiscal Yea	r
4. Project Costs	Schedule				1	
&	0011024110	FY	FY	FY	FY	FY
Schedule		2019	2020	2021	2022	2023
A: Planning & Engineering						
B. Land & Row						
C. Construction						
D. Equipment Purchase		\$5,000				
E. Interest Costs		ψο,σσσ				
F. Other Costs					ļ	
5. Proposed Financing:						L
General Fund	1 \$	5,000		100	0/_	
Water Fund	4 4			100	. // //	
Sewer Fund	Đ Đ				. % . %	
	Đ _i				. % . %	
Federal Aid	Þ					
State Aid	. *				%	
Other - Equi _ş).				%	
Held on Reserve:						

CAPITAL IMPROVEMENTS PROGRAM, PROJECT PROPOSALS

FY - 2018/2019 - 2022/2023

1. Project				2. Departme	ent		-
Impound Lot Pavi				Police			
3. Project Backgr	ound, Purpose	and Objectiv	res				
Application of a pa				improve w	inter and su	mmer maint	enance.
Improves accessii	bility during win	ter towing o	perations.				
		Projected	Est	imated Exp	enditures by	/ Fiscal Year	r
4. Project Costs		Schedule		imated Exp	onaliares b	7 Tibodi Tedi	·
&		Jonioudio	FY	FY	FY	FY	FY
Schedule			2019	2020	2020	2021	2022
A: Planning & Eng	ineerina		3,000.00				
B. Land & Row	9		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		ĺ		
C. Construction			ĺ				
D. Equipment Purc	hase				J		
E. Interest Costs					1		
F. Other Costs							
5. Proposed Finan	cina:						
	General Fund	\$	3,000		100	%	
	Water Fund	\$	_,	-		%	
	Sewer Fund	\$		-		%	
	Federal Aid	\$		-		%	
	State Aid	\$.	-		%	
	Other - Equip.	\$		-		%	ŀ
	=	Ψ,		-			
Held on Reserve:			\$3,000				

CAPITAL IMPROVEMENTS PROGRAM, PROJECT PROPOSALS

FY - 2018/2019 - 2022-2023

1. Project				2. Departm	ent		
HVAC Repair/Repla	acement			Police			
3. Project Backgro	ound, Purpose	and Objectiv	res				
Annual contribu							
is the 15th winter f	or system oper	ation. Engin	eers report t	he system h	nas a 15-yeai	r lifespan. Re	egular
maintenance is ext		of the syste	m but we are	beginning	to experienc	e diminshed	l efficiency
and failure of comp	oonents.						
		Projected	Est	timated Exp	enditures by	Fiscal Year	
4. Project Costs		Schedule		1			
&			FY	FY	FY	FY	FY
Schedule			2019	2020	2021	2022	2023
A: Planning & Engi	neering						
B. Land & Row							ļ
C. Construction						1	
D. Equipment Purc	hase		5,000	5,000	5,000	5,000	5,000
E. Interest Costs						1	
F. Other Costs				ĺ			
5. Proposed Financ	ing:						
	General Fund	\$	25,000		100 '	%	
	Water Fund	\$				%	
	Sewer Fund	\$				%]
	Federal Aid	\$		-		%	
	State Aid	\$		-		%	
	Other - Equip.	\$				%	
Held on Reserve:				-			

CAPITAL IMPROVEMENTS PROGRAM, PROJECT PROPOSALS

FY - 2018/2019 - 2022-2023

1. Project			2. Departme	ent		
Handicap Door Openers		ĺ	Police			
3. Project Background, Purpose	and Objectiv	es				
The exterior and interior lobby do	ors to the po	lice station	require man	ually pulling	the doors	out.
There is no mechanical assist. Th	e lobby and	services are	inaccessibl	e to those v	vith ambula	tory
disabilities. This project corrects	that deficien	су.				
	Projected	Est	timated Exp	enditures by	Fiscal Yea	r
4. Project Costs	Schedule					
&.	,	FY	FY	FY	FY	FY
Schedule		2019	2020	2021	2022	2023
A: Planning & Engineering						
B. Land & Row						
C. Construction			,			
D. Equipment Purchase		6,000	1			
E. Interest Costs						
F. Other Costs						
5. Proposed Financing:						
General Fund	\$_	6,000	_	100		
Water Fund	\$_		_		%	
Sewer Fund	\$_		-		%	J
Federal Aid	\$		-		%	
State Aid	\$		_		%	
Other - Equip.	\$_		_		%	
Held on Reserve:						

CAPITAL IMPROVEMENTS PROGRAM, PROJECT PROPOSALS

FY - 2018/2019 - 2022/2023

1. Project				2. Departm	ent		
Emergency Operations Center Police 3. Project Background, Purpose and Objectives							
Original project pr		_		quipment.	A grant has	been awarde	ed to fund
the projecThe proje	ect is moved fro	om FY 2021 t	to FY 2018.				
		Projected	Est	imated Exp	enditures by	y Fiscal Yea	r
4. Project Costs		Schedule					
&			FY	FY	FY	FY	FY
Schedule			2019	2020	2020	2021	2022
A: Planning & Engi	neering						
B. Land & Row							
C. Construction							
D. Equipment Purc	hase]		1		
E. Interest Costs							
F. Other Costs							
5. Proposed Finance	ing:						
	General Fund	\$				%	
	Water Fund	\$				%	
	Sewer Fund	\$				%	ļ
	Federal Aid	\$	14,553.83		100	%	
	State Aid	\$				%	
	Other - Equip.	\$				%	
		· .					
Held on Reserve:							

CAPITAL IMPROVEMENTS PROGRAM, PROJECT PROPOSALS

FY - 2018/2019 - 2022/2023

1. Project Tennis Court Maintenance & Resurfacing 2. Department							
1 *	ion Park			Parks & Re	creation		
3. Project Backgr	ound, Purpose	and Objecti	ves				
These tennis cour	ts were comple	tely resurfa	ced in fall of	2016, except	t for the bas	ketball cour	t.
To maintain these	courts in good	condition t	o avoid defei	red mainten	ance		
Continue to provid	de safe and well	l-maintaine	d facilities				
		Designatori		Almostad Fun	andituna la	F:! V	
4. Project Costs		Projected Schedule	E	stimated Exp	enditures b	y riscai Teai	
&		Scriedale	FY	FY	FY	FY	FY
Schedule			2019	2020	2020	2021	2022
A: Planning & Eng	ineering		2019	2020	2020	2021	2022
B. Land & Row	meering						
C. Construction			\$5,500	\$5,500	\$5,500	\$5,500	\$5,500
D. Equipment Purc	chase		40,000	\$0,000	ψ0,000	ψο,οσο	ψ0,500
E. Interest Costs		1					
F. Other Costs							
5. Proposed Finan	cing:	·	1				
	General Fund		27,500		100	%	
	Water Fund		\$			%	
	Sewer Fund		\$			%	
	Federal Aid		<u> </u>			%	
	State Aid	5	5	-		%	
	Other - Equip.		5			%	
					-		
Held on Reserve:			\$0				

CAPITAL IMPROVEMENTS PROGRAM, PROJECT PROPOSALS

FY - 2018/2019 - 2022/2023

Project Tennis Court Maintenance & Resurfac East Middlebury			facing	2. Departme			
3. Project Background,	Purpose a	nd Objectiv	/es				
2013 was the last year t				they are sho	wing some	signs of nee	ded repair
					9	0.9	aca ropan
Purpose: To stay ahead	of deferre	d maintena	ance to lowe	r costs of ma	aintenance a	and good pla	ying surfac
Objectives: Set aside m	oney each	year for ac	cumulation (of funs to do	a whole pro	ject in one y	/ear.

		Projected	Es	timated Exp	enditures by	y Fiscal Year	•
4. Project Costs		Schedule					
&			FY	FY	FY	FY	FY
Schedule			2019	2020	2020	2021	2022
A: Planning & Engineeri	ng			l i			
B. Land & Row							
C. Construction			\$7,000	\$7,000	\$7,000	\$7,000	\$7,000
D. Equipment Purchase							
E. Interest Costs							
F. Other Costs							
5. Proposed Financing:							
	eral Fund	\$			100		
	er Fund	\$				%	
	er Fund	\$				%	
	eral Aid	\$				%	
	e Aid	\$		· ;		%	
Othe	er - Equip.	\$				%	
Held on Reserve:			\$7,000				

CAPITAL IMPROVEMENTS PROGRAM, PROJECT PROPOSALS

FY - 2018/2019 - 2022/2023

Project Tennis Court Maintenance & Resurface Harold Curtiss Park		acing	2. Departme				
				Parks & Re	creation		
3. Project Backgi							
The Prudential Co	mmittee of East	Middlebury	would like t	o offer assis	tance in the	reconstruc	tion of the
basketball area by							
cars from driving				J	• /	ŭ	
•	. , ,						
Improve the facili	ty which is curre	ntly in a hig	h state of di	srepair.			
Provide the E. Mic	ddlebury Commu	inity with we	ll maintaine	d and versat	tile recreation	on facility	
		Projected	Es	timated Exp	enditures by	y Fiscal Yea	r
4. Project Costs		Schedule					
&			FY	FY	FY	FY	FY
Schedule			2019	2020	2020	2021	2022
A: Planning & Eng	ineering						
B. Land & Row							
C. Construction		l	\$7,000	\$7,000	\$7,000		
D. Equipment Pur	chase						
E. Interest Costs							
F. Other Costs							
5. Proposed Finar	ncing:						
	General Fund	\$	21,000		100	%	
	Water Fund	\$		_		%	
	Sewer Fund	\$		_	-	%	
	Federal Aid	\$		_		%	
	State Aid	\$		-		%	
	Other - Equip.	\$		-		%	

\$7,000

6. Comments:

Held on Reserve:

CAPITAL IMPROVEMENTS PROGRAM, PROJECT PROPOSALS

FY - 2018/2019 - 2022/2023

1. Project	2. Department
Baseball Fields at Rec Park & Jack Brown	Parks & Rec

3. Project Background, Purpose and Objectives

These two fields have taken a back seat on maintenance behind other things, therefore they are in poor concand at times unsafe.

Maintain the fields during the good weather months by york raking, adding specialized dirt, weed removal To provide safe and well-maintained fields for Little League and hopefully Adult Softball

Build dugouts for each team side to give shelter in inclement weather at both Rec Park and Jack Brown

	Projected	Es	timated Expe	enditures by	Projected Estimated Expenditures by Fiscal Year					
4. Project Costs	Schedule									
&		FY	FY	FY	FY	FY				
Schedule		2019	2020	2021	2022	2023				
A: Planning & Engineering		500.00	\$500.00							
B. Land & Row										
C. Construction		2,500.00	2,500.00							
D. Equipment Purchase		2,500.00	2,500.00							
E. Interest Costs		ŀ		i						
F. Other Costs										
5. Proposed Financing:										
General I	Fund \$	<u>11,000</u>	_	100 9	%					
Water Fu	nd \$				%					
Sewer Fu	ınd \$				%					
Federal A	Aid \$				%					
State Aid	\$				%					
Other - E	guip. \$		_		%					

CAPITAL IMPROVEMENTS PROGRAM, PROJECT PROPOSALS

FY - 2018/2019 - 2022/2023

1. Project				2. Departm	ont		
Bleacher Improve	monte			Parks & Re			
		and Ohiootiv		raiks & Ke	creation		
3. Project Backgr						4- 41 1-	
There are four set			e of the fend	ce for viewir	ig of swim n	neets, tnese n	ave no cover
during the hotest					1.11 (111.		
Removal of pine to		ı sap droppı	ng and need	lies that clo	gged the filt	er system wer	e removed ar
this left no shade							
To purchase an overhead awning for the bleachers to match the awning inside the pool deck area, with a co							
		Projected	Es	timated Exp	enditures by	y Fiscal Year	_
4. Project Costs		Schedule					
&			FY	FY	FY	FY	FY
Schedule			2019	2020	2021	2022	2023
A: Planning & Eng	jineering		1,000				
B. Land & Row							
C. Construction			5,000.00				
D. Equipment Pure	chase		20,000.00				
E. Interest Costs							
F. Other Costs							
5. Proposed Finan	icing:						
	General Fund	\$	26,000		100	%	
	Water Fund	\$				%	
	Sewer Fund	\$				%	
	Federal Aid	\$		W 8		%	
	State Aid	\$				%	
	Other - Equip.	\$				%	
		*					
Held on Reserve:							

CAPITAL IMPROVEMENTS PROGRAM, PROJECT PROPOSALS

FY - 2018/2019 - 2022/2023

				T				
1. Project		2. Departme						
Additional perman				Parks & Re	creation			
3. Project Backgr								
Currently, there is					the Commu	unity Buildin	ıg	
To offer an addition		-	•					
Recreation Park co	ontinues to grov	w and beco	me a destina	ition park, th	erefore sho	uld have thi	s amenity	
		Projected						
4. Project Costs		Schedule						
&			FY	FY	FY	FY	FY	
Schedule			2019	2020	2021	2022	2023	
A: Planning & Eng	ineering		1,000.00					
B. Land & Row								
C. Construction			\$30,000	\$30,000		1		
D. Equipment Purc	chase							
E. Interest Costs								
F. Other Costs						<u></u>		
5. Proposed Finan	_							
	General Fund	;	\$ <u>61,000</u>	_	100			
	Water Fund	;	\$			%		
	Sewer Fund	;	\$			%		
	Federal Aid	;	\$			%		
	State Aid	;	\$			%		
	Other - Equip.		\$			%		
Held on Reserve:								

CAPITAL IMPROVEMENTS PROGRAM, PROJECT PROPOSALS

FY - 2018/2019 - 2022/2023

1. Project				2. Departm	ent		
Community Buildi	ng			Parks & Re	С		
3. Project Backgro	ound, Purpose a	and Objectiv	/es				
Deferred Maintena	nce is causing	deterioratio	n of the sidir	ng and wind	ow mullions	>	
Correct drainage i	ssue from rain t	o asphalt ai	nd install cui	tain drain a	round build	ing	
Reside the buildin				uts			
Maintain the interg	rity of this com	munity asse	et				
		I=					
		Projected	Estimated Expenditures by Fiscal Year				
4. Project Costs		Schedule					
&			FY	FY	FY	FY	FY
Schedule			2019	2020	2021	2022	2023
A: Planning & Eng	ineering			l	ı	1	ı
B. Land & Row							
C. Construction			7,500.00	7,500.00	7,500.000	\$ 7,500.00	\$ 7,500.00
D. Equipment Purc	nase						
E. Interest Costs							
F. Other Costs	-1						
5. Proposed Finan	cing: General Fund	•	27 500		400	0/	
	Water Fund	\$	<u>37,500</u>		100	-	
	Sewer Fund	D C			-	.% .%	
	Sewer Fund Federal Aid	\$			- 1/	, % . %	
:	State Aid	\$. % . %	
		Đ _.				. % . %	
	Other - Equip.	Ф				. 70	
Held on Reserve:							

CAPITAL IMPROVEMENTS PROGRAM, PROJECT PROPOSALS

FY - 2018/2019 - 2022/2023

1. Project			2. Departme	ent		
Equipment and Supplies			Parks & Red			
3. Project Background, Purpose	and Objectiv	res				
Re-design of Tot Lot at Rec Park i	•		ce, installatio	on of lands	cape, and re	placement
badly needed toys.					•	-
Two toys have been removed due	to poor con	dition and s	afety hazard	s, this is an	opportunity	y to upgrade
the Tot Lot which is in run down a	and in poor o	condition.				
Remove the chain link fence, insta	all a vegetat	vie border in	place of cha	ain link for	eye appeal a	and keeping
toddlers within the space. Installa	tion of new	and stimulat	ing play equ	ipment.		
	T=					
	Projected	Es	timated Exp	enditures b	y Fiscal Yea	r
4. Project Costs	Schedule					
&.		FY	FY	FY	FY	FY
Schedule		2019	2020	2021	2022	2023
A: Planning & Engineering		1,000.00				
B. Land & Row		***				
C. Construction		\$3,000	\$3,000			
D. Equipment Purchase		10,000	10,000			
E. Interest Costs						
F. Other Costs	l	ļ				
5. Proposed Financing: General Fund	¢	27,000		100	0/	
Water Fund	\$ \$	27,000	-	100	,	
Sewer Fund	φ \$		-		/° %	
Federal Aid	\$		m ==		%	
State Aid	Ψ \$		a = ==		%	
Other - Equip.	\$		-		%	
Care - Equip.	Ψ		-		70	
Held on Reserve:						

1. Project

TOWN OF MIDDLEBURY

CAPITAL IMPROVEMENTS PROGRAM, PROJECT PROPOSALS

FY - 2018/2019 - 2022/2023

2. Department

Pool and Poolhouse		Parks & Recreation				
3. Project Background, Purpose a	and Objectiv	es				
This pool was built in 1977 and sin		have contir	nued to asse	ess, address	, retrofit, imp	rove, and fix
what is possible with an aging po-						
Continue to take care of deferred	maintenance	and addres	ss internal f	unctions of t	he pool such	as under-
ground piping, insulation of pump				improving s	afety.	
Keep a well-loved pool running we	all and impro	ove attendar	nce.			
	In					
4 Project Coots	Projected	ES	timated Exp	enditures by	y Fiscal Year	T
4. Project Costs	Schedule	F.V.		E)/	F14	
& Saladula	'	FY	FY	FY	FY	FY
Schedule		2019	2020	2021	2022	2023
A: Planning & Engineering B. Land & Row	1	1	I	1 (I	ı
		00 000 00				
C. Construction		30,000.00	30,000.00	#########	\$ 30,000.00	\$ 30,000.00
D. Equipment Purchase		3,400	3,400	3,400	3,400	3,400
E. Interest Costs					ļ	
F. Other Costs						<u> </u>
5. Proposed Financing:	•	407.000			24	
General Fund	\$_	<u>167,000</u>			%	
Water Fund	\$.				%	
Sewer Fund	\$.				%	
Federal Aid	\$.				%	
State Aid	\$.				%	
Other - Equip.	\$.				%	
Held on Reserve:						

1. Project

TOWN OF MIDDLEBURY

CAPITAL IMPROVEMENTS PROGRAM, PROJECT PROPOSALS

FY - 2018/2019 - 2022/2023

2. Department

Paving of Rec Park Emergency Service Road Parks & Recreation								
3. Project Backgro	ound, Purpose a	and Objectiv	/es					
This service road	is highly used b	y the Teen (Center, Mem	orial Sports	Center, and	the Town P	ool and	
on occasion emer				-	•			
By paving the dirt	road, annual ma	aintenance d	of pot holes	and grading	could be eli	iminated		
To provide a more							ervices in	
Recreation Park.						- ,		
		Projected	Es	timated Exp	xpenditures by Fiscal Year			
4. Project Costs		Schedule				-		
&			FY	FY	FY	FY	FY	
Schedule			2019	2020	2021	2022	2023	
A: Planning & Eng	ineering							
B. Land & Row								
C. Construction			\$20,000					
D. Equipment Purc	hase							
E. Interest Costs		ļ]					
F. Other Costs								
5. Proposed Finan	cing:					-		
	General Fund	\$	20,000		100	%		
	Water Fund	\$				%		
	Sewer Fund	\$				%		
	Federal Aid	\$		v1		%		
	State Aid	\$		•		%		
	Other - Equip.	\$,		%		
Held on Reserve:								

1. Project

TOWN OF MIDDLEBURY

CAPITAL IMPROVEMENTS PROGRAM, PROJECT PROPOSALS

FY - 2018/2019 - 2022/2023

1. Project			2. Departme	ent		
Harold Curtiss Park PicnicTables	& Pavilion		Parks & Re	С		
3. Project Background, Purpose a						
Harold Curtiss Park is a very popu	lar park for t	the commun	ity of East N	liddlebury a	nd yet, there a	are very few
amenities for families to picnic an						-
The purpose of this request is to g	get more pic	nic tables a	nd the mater	ials for build	ding a small p	icnic pavilio
The objective is to make sure we	serve all of o	our constitue	ents, even ir	East Middle	ebury with the	same
amenities we serve the greater Mi	ddlebury coi	mmunity: tal	bles and cha	airs, playgro	unds, shelters	s
	<u> </u>					
4.5.4.0.4	Projected	Es	timated Exp	enditures by	/ Fiscal Year	
4. Project Costs	Schedule					
&		FY	FY	FY	FY	FY
Schedule		2019	2020	2021	2022	2023
A: Planning & Engineering						
B. Land & Row		_				
C. Construction		2,500.00	2,500.00			
D. Equipment Purchase		2,000.00	2,000.00			
E. Interest Costs						
F. Other Costs						
5. Proposed Financing:						
General Fund	\$_	<u>4,500</u>		100		
Water Fund	\$_		-		%	
Sewer Fund	\$_		-		%	
Federal Aid	\$_				%	
State Aid	\$_		_		%	
Other - Equip.	\$_		_		%	
Held on Reserve:						

CAPITAL IMPROVEMENTS PROGRAM, PROJECT PROPOSALS

FY - 2018/2019 - 2022/2023

1. Project				2. Departm	ent		·
Memorial Sports Center Roof			Parks & Rec				
3. Project Backgr	ound, Purpose	and Objective	98				
The roof of the Me	emorial Sports C	enter will ne	ed to be rep	placed within	n five years		
Age of roof					_		
To prevent deferre	ed maintenance	which would	lead to lea	ks in the roo	of		
		Projected	Es	timated Exp	enditures by	/ Fiscal Year	
4. Project Costs		Schedule					
&		1 1	FY	FY	FY	FY	FY
Schedule			2019	2020	2021	2022	2023
A: Planning & Eng	jineering					-	
B. Land & Row							
C. Construction							
D. Equipment Purchase							
E. Interest Costs					i		
F. Other Costs							
5. Proposed Finan	icing:						
	General Fund	\$_	<u>1,000</u>		100	%	
	Water Fund	\$				%	
	Sewer Fund	\$			_	%	
	Federal Aid	\$				%	
	State Aid	\$				%	
	Other - Equip.	\$				%	
Held on Reserve:			\$1,000				

Flood Resiliency Project

Part 5:	Project Description (for the Preferred Alternative)				
Project Description	This is a phased application. Phase 1 is for final engineering of the upstream and downstream project elements (1 and 3 below), la or easement acquisition, permitting, archeological review and a refining and finalization of the benefit cost analysis. Engineering an is complete for element 2 below. Phase 2 will cover construction and implementation costs. The project consists of three main components: 1) Increase flood storage capacity between Lower Plains Road Bridge and Grist Mill Bridge. Increase sediment and debris storage area by excavating approximately 5 acres to the one year flood elevation. Increased floodplaticapacity will reduce the need for channel maintenance between the two town bridges, reduce sediment deposition upstream of Grist Bridge and scour under and downstream of GMB and it will limit possible backup at the Lower Plains Road Bridge by allowing more move downstream during most conditions. It will also reduce the chances of the river jumping the right bank in this vicinity. This project hard armoring the edge of the new floodplain. 2) Rebuild existing floodwall/erosion control structure at the Grist Mill Bridge and extend/replace the downstream 110'. Install cutoff wall for scour protection and tie back anchors to resist overturning on existing structure. Replace downstream 110' of loterosion control structure. The structure will have a cutoff wall to prevent undermining and resist overturning. (Alternatives 3, 5 and engineers alternative analysis.) 3) Hard armor 1,400' of Ossie Road localized minor flood reduction project (flood barrier). Armor the downstream portion of the localized minor flood reduction project where flood flows run along the face of it. Monitor channel movement at the upstream portion of the barrier.				
Expected Life of Project	1) Floodplain will require maintenance (removal of sediment) after 2 or 3 one-hundred year events; 2) Rebuilding of the existing erosion control structure at the Grist Mill Bridge is expected to last ~50 years and the new extension will last 75 years; and 3) Riprap is typically expected to last 20 years, however, this riprap, when constructed, will not have consistent flows along it, so it may last longer.				
	V	Digital Photos			
Supporting Documentation: (Attach)	V	Engineering Studies			
	V	Site Diagrams			

Flood Resiliency Project

Project Costs for Phase 1	of Preferi	red Alternative		
Item	Unit Qty.		Unit Cos	t Cost Estima
Engineer Technical Assistance: Final engineering and cost estimates for increasing the floodplain between Lower Plains Road Bridge and Grist Mill Bridge and riprap/bioengineering at the toe of the Ossie Road berm at the edge of the flood plain forest/fluvial erosion hazard zone; state and federal permitting; bid procurement.		Hours	\$120	\$35,640.00
Consulting River Scientist Technical Assistance: Revise and update Benefit/Cost Analysis; respond to remaining Request for Information items; landowner negotiations; public meetings and outreach; federal and state permitting; bid and construction oversight.		Hours	\$70	\$26,600.00
Plan reproduction and printing of construction documents	40	Page	\$5	\$200.00
Mileage	900	Miles	\$0.57	\$508.50
urcheological Resource Assessment (see attached scope of work)	1	Assessment	\$2,000.00	\$2,000 00
hase 1 Archeologial Review	2	Field Review	\$5,000.00	\$10,000.00
xpert guidance on Benefit Cost Analysis	16	Hours	\$150	\$2,400,00
re-award costs: HMGP application and BCA development	50	Hours	\$65	\$3,250.00
hase 1 sub-total				\$80,598.50
hase 2. Construction				
ngineering oversight	216	Hours	\$120	\$26,000 00
onsulting River Scientist	60	Hours	\$70	\$4,200,00
onstruction and access easements	10	Easement	\$3,000	\$30,000.00
and Acquisition	2.5	Acres	\$2,000	\$5,000,00
crease floodplain between Lower Plains Road Bridge and Grist Mill Bridge	5	Acres	\$97,800	\$489,000,00
ard armor edge of new floodplain.	2,000	Feet	\$143	\$286,000.00
epair existing floodwall (historic abutments)	200	Feet	\$1,750	\$350,000.00
tend floodwalf 110' downstream.	110	Feet	\$4,773	\$525,000.00
rd armor 1,4000' of Ossie Road berm	1,400	Feet	\$143	\$200,000.00
leage	900	Miles	\$0.57	\$508 .50
ase 2 sub-total				\$1,915,708,50
		Total Project Cost Estimate		\$1,996,307.00

25% Town Share 461,076.75

FY 18 20,150.00

FY 19 440,926.75

Randed to 450,000.00