TOWN OF RICHMOND, VERMONT

HWY DEPT. CAPITAL PLAN

Unapproved Working Draft

Unfinished Draft for Review as of 11-7-19

Rate of Future Inflation 3%

Equi	pment	Inventory
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	Existing	Equipme	nt		Future	Equipm	ent Life	e Cycle							
					Life	Fiscal Yr	Gross	Less	Net	Cash Dow	/npayment	[Debt Financir	ng	Comments
	Ye	ar	Currei	nt Usage	(yrs)	Replaced	Cost	Trade-In	Cost	(%)	(\$)	Amt.	Years	Rate	
	Made	Purchased	Miles	Hours											
quipment Inventory															
Dump Truck 1		FY15				FY23	\$140,000	\$20,000	\$120,000	21%	\$25,000	\$95,000	5	4%	8 year cycle
Dump Truck 2		FY16				FY24	\$140,000	\$20,000	\$120,000	21%	\$25,000	\$95,000	5	4%	8 year cycle
Dump Truck 3		FY19				FY27	\$140,000	\$20,000	\$120,000	21%	\$25,000	\$95,000	5	4%	8 year cycle
Dump Truck 4		FY20				FY28	\$140,000	\$20,000	\$120,000	21%	\$25,000	\$95,000	5	4%	8 year cycle
Tractor with Snow Blower						FY25	\$44,000		\$44,000	100%	\$44,000	\$0			8 year cycle
Foreman's Pickup Truck						FY21	\$55,000		\$55,000	100%	\$55,000	\$0			4 year cycle
Road Grader						FY30	\$300,000		\$300,000	50%	\$150,000	\$150,000	5	4%	12 year cycle
Roadside Mower						FY21	\$100,000		\$100,000	25%	\$25,000	\$75,000	5	4%	10 year cycle
Front Bucket Loader						FY24	\$120,000		\$120,000	0%	\$0	\$120,000			10 year cycle
Excavator - Rubber Tire						FY25	\$150,000		\$150,000	0%	\$0	\$150,000			12 year cycle
nnual Maintenance										#DIV/0!	\$0	\$0			
Paving									\$0	#DIV/0!	\$0	\$0			Determined annually by plan
Gravel Plan									\$0	#DIV/0!	\$0	\$0			Determined annually by plan
Stormwater and sidewalks							\$115,000		\$115,000	0%	\$0	\$115,000			
frastructure										#DIV/0!	\$0	\$0			
East Main Streetscape							\$650,000		\$650,000	0%	\$0	\$650,000			
Millet										#DIV/0!	\$0	\$0			
Jericho Rd										#DIV/0!	\$0	\$0			

Purchases with Cash (includes use of reserve funds)

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Equipment Inventory																				
Dump Truck 1				\$27,318								\$34,606								\$43,838
Dump Truck 2					\$28,138								\$35,644							
Dump Truck 3								\$30,747								\$38,949				
Dump Truck 4									\$31,669								\$40,118			
Tractor with Snow Blower						\$51,008								\$64,615						
Foreman's Pickup Truck		\$56,650				\$63,760				\$71,763				\$80,769				\$90,907		
Road Grader											\$201,587									
Roadside Mower		\$25,750										\$34,606								
Front Bucket Loader																				
Excavator - Rubber Tire																				
Annual Maintenance																				
Paving	\$293,000	\$293,000	\$294,000	\$294,000	\$295,000	\$295,000	\$298,000	\$298,000	\$300,000	\$300,000	\$300,000	\$305,000	\$417,748	\$430,280	\$444,701	\$458,042	\$473,388	\$487,590	\$507,325	\$522,545
Gravel Plan	\$150,000	\$150,000	\$152,000	\$152,000	\$155,000	\$155,000	\$157,000	\$184,481	\$190,016	\$198,326	\$204,275	\$214,556	\$220,993	\$230,560	\$226,888	\$233,695	\$243,915	\$251,233	\$263,877	\$271,793
Stormwater and sidewalks																				
Infrastructure																				
East Main Streetscape																				
Millet																				
Jericho Rd																				
Total	 \$443,000	\$525,400	\$446,000	\$473,318	\$478,138	\$564,768	\$455,000	\$513,228	\$521,685	\$570,088	\$705,863	\$588,768	\$674,385	\$806,225	\$671,590	\$730,687	\$757,421	\$829,730	\$771,202	\$838,176

Future Debt Incurred by Fiscal Year

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Equipment Inventory																				
Dump Truck 1				\$103,809								\$131,502								\$166,583
Dump Truck 2					\$106,923								\$135,447							
Dump Truck 3								\$116,838								\$148,007				
Dump Truck 4									\$120,343								\$152,447			
Tractor with Snow Blower																				
Foreman's Pickup Truck																				
Road Grader											\$201,587									
Roadside Mower		\$77,250										\$103,818								
Front Bucket Loader																				
Excavator - Rubber Tire																				
Annual Maintenance																				
Paving																				
Gravel Plan																				
Stormwater and sidewalks																				
Infrastructure																				
East Main Streetscape																				
Millet																				
Jericho Rd																				
Total	\$0	\$77,250	ŚO	\$103,809	\$106,923	\$0	Śſ	\$116,838	\$120,343	ŚO	\$201,587	\$235,320	\$135,447	\$0	\$0	\$148,007	\$152,447	\$0	\$0	\$166,583

Annual Debt Payments - Principal

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Equipment Inventory	1 .	-	-			•		•	•	•		•			•				•	
Dump Truck 1	\$19,844				\$19,166	\$19,933	\$20,730	\$21,559	\$22,421				\$24,279	\$25,250	\$26,260	\$27,310	\$28,403			
Dump Truck 2	\$21,480	\$21,480				\$19,741	\$20,531	\$21,352	\$22,206	\$23,094				\$25,007	\$26,008	\$27,048	\$28,130	\$29,255		
Dump Truck 3									\$21,571	\$22,434	\$23,332	\$24,265	\$25,236				\$27,326	\$28,419	\$29,556	\$30,738
Dump Truck 4	\$26,500	\$26,500	\$26,500	\$26,500	\$24,000					\$22,219	\$23,107	\$24,032	\$24,993	\$25,993				\$28,146	\$29,272	\$30,443
Tractor with Snow Blower																				
Foreman's Pickup Truck																				
Road Grader	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000							\$37,219	\$38,707	\$40,256	\$41,866	\$43,540				
Roadside Mower			\$14,262	\$14,833	\$15,426	\$16,043	\$16,685						\$19,168	\$19,934	\$20,732	\$21,561	\$22,423			
Front Bucket Loader																				
Excavator - Rubber Tire																				
Annual Maintenance																				
Paving																				
Gravel Plan																				
Stormwater and sidewalks																				
Infrastructure																				
East Main Streetscape																				
Millet	\$7,046	\$7,046	\$7,046	\$7,046	\$7,046	\$7,046	\$7,046	\$7,046	\$7,046	\$7,046	\$7,046	\$7,046	\$7,046							
Jericho Rd	\$43,200	\$43,200	\$43,200	\$43,200	\$43,200	\$43,200	\$43,200	\$43,200	\$43,200	\$43,200	\$43,200	\$43,200	\$40,800							
Total	\$148,070	\$128,226	\$121,008	\$121,579	\$138,838	\$105,963	\$108,192	\$93,157	\$116,445	\$117,993	\$96,685	\$135,761	\$180,228	\$136,440	\$114,865	\$119,460	\$106,282	\$85,820	\$58,828	\$61,181

Annual Debt Payments - Interest

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Equipment Inventory																				-
Dump Truck 1	\$480				\$4,152	\$3,386	\$2,588	\$1,759	\$897					\$5,260	\$4,289	\$3,279	\$2,229	\$1,136		
Dump Truck 2	\$786	\$393				\$4,277	\$3,487	\$2,666	\$1,812	\$924										
Dump Truck 3									\$4,674	\$3,811	\$2,913	\$1,980	\$1,009				\$5,920	\$4,827	\$3,690	\$2,508
Dump Truck 4	\$4,251	\$3,602	\$2,680	\$1,757	\$835					\$4,814	\$3,925	\$3,001	\$2,039	\$1,040				\$6,098	\$4,972	
Tractor with Snow Blower																				
Foreman's Pickup Truck																				
Road Grader	\$5,220	\$4,176	\$3,132	\$2,088	\$1,044						\$8,063	\$6,575	\$5,026	\$3,416	\$1,742					
Roadside Mower			\$3,090	\$2,520	\$1,926	\$1,309	\$667						\$4,153	\$3,386	\$2,589	\$1,759	\$897			
Front Bucket Loader																				
Excavator - Rubber Tire																				
Annual Maintenance																				
Paving																				
Gravel Plan																				
Stormwater and sidewalks																				
Infrastructure																				
East Main Streetscape																				
Millet																				
Jericho Rd	\$21,806	\$20,419	\$18,942	\$17,387	\$15,761	\$14,068	\$12,312	\$10,503	\$8,652	\$6,743	\$4,847	\$2,891	\$26							l
Police Dept Subtotal	\$32,543	\$28,590	\$27,844	\$23,752	\$23,719	\$23,040	\$19,056	\$14,928	\$16,034	\$16,291	\$19,749	\$14,446	\$12,254	\$13,102	\$8,619	\$5,038	\$9,046	\$12,061	\$8,663	\$2,508

Reserves Used

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Equipment Inventory																				-
Dump Truck 1																				
Dump Truck 2																				
Dump Truck 3																				
Dump Truck 4																				
Tractor with Snow Blower																				
Foreman's Pickup Truck																				
Road Grader																				
Roadside Mower																				
Front Bucket Loader																				
Excavator - Rubber Tire																				
Annual Maintenance																				
Paving																				
Gravel Plan																				
Stormwater and sidewalks																				
Infrastructure																				
East Main Streetscape																				
Millet																				
Jericho Rd																				
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Reserve Fund Balances

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Debt Reserve Fund Balances																				
Highway Capital Reserve																				
Beginning Balance	\$177,863	\$205,563	\$234,094	\$263,481	\$293,749	\$324,926	\$357,038	\$390,113	\$424,181	\$459,270	\$495,412	\$532,639	\$570,982	\$610,476	\$651,154	\$693,053	\$736,209	\$780,659	\$826,443	\$873,600
Withdraws																				
Contributions	\$27,700	\$28,531	\$29,387	\$30,269	\$31,177	\$32,112	\$33,075	\$34,068	\$35,090	\$36,142	\$37,226	\$38,343	\$39,494	\$40,678	\$41,899	\$43,156	\$44,450	\$45,784	\$47,157	\$48,572
Ending Balance	\$205,563	\$234,094	\$263,481	\$293,749	\$324,926	\$357,038	\$390,113	\$424,181	\$459,270	\$495,412	\$532,639	\$570,982	\$610,476	\$651,154	\$693,053	\$736,209	\$780,659	\$826,443	\$873,600	\$922,172
Bridge and Culvert Reserve																				
Beginning Balance	\$244,444	\$281,444	\$319,554	\$358,807	\$399,238	\$440,882	\$483,775	\$527,955	\$573,460	\$620,331	\$668,608	\$718,332	\$769,549	\$822,302	\$876,638	\$932,604	\$990,249	\$1,049,623	\$1,110,778	\$1,173,768
Withdraws				\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Contributions	\$37,000	\$38,110	\$39,253	\$40,431	\$41,644	\$42,893	\$44,180	\$45,505	\$46,870	\$48,277	\$49,725	\$51,217	\$52,753	\$54,336	\$55,966	\$57,645	\$59,374	\$61,155	\$62,990	\$64,880
Ending Balance	\$281,444	\$319,554	\$358,807	\$399,238	\$440,882	\$483,775	\$527,955	\$573,460	\$620,331	\$668,608	\$718,332	\$769,549	\$822,302	\$876,638	\$932,604	\$990,249	\$1,049,623	\$1,110,778	\$1,173,768	\$1,238,648
Guardrail Reserve																				
Beginning Balance	\$0	\$5,000	\$10,150	\$15,455	\$18,895	\$22,499	\$26,270	\$30,214	\$34,337	\$38,643	\$43,137	\$47,827	\$52,717	\$57,814	\$63,124	\$68,653	\$74,407	\$80,395	\$86,622	\$93,096
Withdraws				-\$2,023	-\$2,024	-\$2,025	-\$2,026	-\$2,027	-\$2,028	-\$2,029	-\$2,030	-\$2,031	-\$2,032	-\$2,033	-\$2,034	-\$2,035	-\$2,036	-\$2,037	-\$2,038	-\$2,039
Contributions	\$5,000	\$5,150	\$5,305	\$5,464	\$5,628	\$5,796	\$5,970	\$6,149	\$6,334	\$6,524	\$6,720	\$6,921	\$7,129	\$7,343	\$7,563	\$7,790	\$8,024	\$8,264	\$8,512	\$8,768
Ending Balance	\$5,000	\$10,150	\$15,455	\$18,895	\$22,499	\$26,270	\$30,214	\$34,337	\$38,643	\$43,137	\$47,827	\$52,717	\$57,814	\$63,124	\$68,653	\$74,407	\$80,395	\$86,622	\$93,096	\$99,825

Totals

Total Cash Expenditures	\$443,000	\$525,400	\$446,000	\$473,318	\$478,138	\$564,768	\$455,000	\$513,228	\$521,685	\$570,088	\$705,863	\$588,768	\$674,385	\$806,225	\$671,590	\$730,687	\$757,421	\$829,730	\$771,202	\$838,176
Total Loan Payments	\$180,613	\$156,816	\$148,852	\$145,330	\$162,557	\$129,003	\$127,247	\$108,085	\$132,479	\$134,284	\$116,434	\$150,207	\$192,483	\$149,542	\$123,484	\$124,498	\$115,328	\$97,881	\$67,490	\$63,689
Total Reserve Contributions	\$64,700	\$66,641	\$68,640	\$70,699	\$72,820	\$75,005	\$77,255	\$79,573	\$81,960	\$84,419	\$86,951	\$89,560	\$92,247	\$95,014	\$97,865	\$100,800	\$103,825	\$106,939	\$110,147	\$113,452
Total Reserves Used	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Raised by taxes	\$688,313	\$748,857	\$663,492	\$689,348	\$713,515	\$768,776	\$659,502	\$700,886	\$736,124	\$788,791	\$909,248	\$828,535	\$959,114	\$1,050,781	\$892,939	\$955,985	\$976,574	\$1,034,550	\$948,840	\$1,015,317
Dollar increase over previous FY		\$60,545	-\$85,365	\$25,856	\$24,167	\$55,261	-\$109,274	\$41,384	\$35,238	\$52,667	\$120,457	-\$80,713	\$130,579	\$91,667	-\$157,842	\$63,047	\$20,589	\$57,976	-\$85,710	\$66,477
Percentage increase over previous FY		8.80%	-11.40%	3.90%	3.51%	7.74%	-14.21%	6.27%	5.03%	7.15%	15.27%	-8.88%	15.76%	9.56%	-15.02%	7.06%	2.15%	5.94%	-8.28%	7.01%