

Brattleboro Union High School Sites Five Year Capital Plan						Revision Date:	10.14.21	RC	Projects Subject to Board Approval		
BAMS/WRCC/BUHS	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Long Term Replacement Date	Notes	
Heating Systems											
Boilers		\$2,322							2028	Messersmith phase 1 \$68,000 boiler refractory replacement,	
Boilers									2028	2 HP smith oil boiler [60% backup]	
Fuel tanks									2033	Below Ground Fuel Oil #2, 2000 ga [near chip bin]	
Hot water distribution					\$30,000	\$150,000			2023	Pumps, Heat exchangers, Glycol system, Pressure relief valves, Balancing valves. .	
1250 gallon domestic hot water dual fuel PVI tank					\$58,000				2003	Replace tube bundle for gas heat exchanger.	
Stacks / Polution control					\$17,500	\$50,000			2023	Permit review for renewal due 10/1/22. RC review potential modification-possible pollution control improvement will be required. RC working with All4 LLC engineering & legal consulting \$17500 to offset ANR proposed 300k improvement. RC expects results of consulting will allow buhs to use LSR existing core	
Insulation	\$5,484								2022	Ventilation duct insulation on roof	
Piping		\$47,981					\$25,000		2022	Boiler water victrolc piping gaskets replacements, affects entire campus, part of 2003 renovation	
Valves						\$50,000			2023	Related to Heat Exchanger project	
Control System 1				\$31,139		\$150,000	\$125,000		2021	FY21 Covid related contol improvements CTI, IAQ grant funded. FY22 +; Replace obsolete controler system, will use IP over Backnet, open source, and will reduce # of controlers throught building. Jace/router & Server	
Control Systems 2	\$20,930								2034	RC bid 5/11/18 for the rooms #19, #21, #16 project to be complete 7/1/18, bid \$21k, Also VFD for Wood Chip sys Messersshmit\$9.2k	
Air Handling Systems											
Air handling unit #3						\$25,000			2023	WRCC/TIC office. Did not meet ASHRAE 62.1 & 62.2 standard for acceptable indoor air quality.	
Roof top Units W/O-AC							\$22,500	\$22,500	2024	middle school gym / high School ventilation system,	
Roof top Units/W-AC					\$31,998				2024	Replace AC compressors in RTU #3 and RTU #7, Completed as of October 2021	
Heat Recovery Ventilation Units/HRVU						\$200,000			2024	#26 Serves Kitchen serving area. #9&10 serve BAMS locker rooms. #24&25 serve BUHS locker rooms. Did not meet ASHRAE 62.1 & 62.2 standard for acceptable indoor air quality.	
Make up Air Units				\$50,100			\$95,000		2024	July 2020 replace disabled makeup air unit #3 serving the Culinary Arts Program.	

BAMS/WRCC/BUHS	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Long Term Replacement Date	Notes
Balancing Air Supply/Exhaust Systems				\$89,239					2031	COVID19 related exp per ASHRAE standards fund by IAQ grant. Environmental Testing and Balancing - subbed thru BG Mechanical
HVAC replacement					\$52,000	\$200,000			2025	MS & HS girls & boys locker rooms/restrooms & Cafe serving line. Did not meet ASHRAE 62.1 & 62.2 standard for acceptable indoor air quality.
Cooling Systems						\$50,000			2043	Cool after school area 4 class rooms for after school and summer programs
Auditorium/Admin wing									2030	
Systems										
Fire Alarm System Upgrade									2033	Installed with upgradable pannels in 2003 project
Sprinkler System									2041	2016 installed 2 points of reference for control sensor system
Mechanical Controls										
Circulation pumps				\$0					2021	Heating exchange units, 6 units in total, replace 2 on a cycle
Lighting Systems										
Fluorescent fixtures										
Lighting panels				\$0					2020	approaching maximum load on switchgear and sub pannels, LED retrofit hallways
Emergency lighting						\$20,000			2023	maintain battery backup to emergency systems
Exterior lighting					\$5,000				2022	BAMS parking lot repair solar lighting
Occupancy controls						\$20,000			2023	Individual units beginning to fail (100's), mass replacement
Signal Systems										
Telephone							\$50,000		2024	
Security alarm/devices	\$9,532								2028	replacement of analog cameras, blinds for alerts, hardening windows
Roof Systems										
Roofing							\$474,870		2024	
Roofing								\$474,900	2025	
Roofing repair				\$0	\$20,000					high school multipurpose room, area by PTC, hallway connecting gymnasiums / skylight repair
Roofing Kitchen area						\$70,000			2020	Update as of 9/30/21 from RC no vendors are avail, uncertain when materials will be available
Exterior Wall Systems										
Facade integrity						\$35,000			2023	maintaining expansion joints
Brick Re-Pointing										

BAMS/WRCC/BUHS	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Long Term Replacement Date	Notes
Doors						\$35,000			2023	Metal outside doors have advanced rot
Window systems								\$50,000	2025	wing priority
Green House Skin						N/A			2023	Greenhouse no longer operational. Used for storage.
Interior Construction										
Locker Room Upgrade						\$100,000	\$125,000	\$50,000	2024	FY24 Middle school boys & girls athletic lockers, upgrade from 1957 original construction & HighSchool Boys & Girls address gender neutral standards
Renovation										
Power Distribution Systems										
Wiring, conduits, & distribution panels						\$0	\$50,000		2023	Upgrade 600v, 480v switch gear
Electrical Transformers									2033	Review Backup Generator capacity for expanded power needs
Athletic Fields & Facilities										
Campus Master Plan			\$21,350						2025	Gale Associates campus use study of phase 1 redesign options
Tenny Field [baseball]		\$13,542		\$0		\$20,000			2020	Estimated total restoration, by Stevens & assoc. = 183,047 [Nov. 2009]
Natowich Field					\$75,000	\$125,500	\$125,500	\$125,500		currently football, lacrosse are primary users, improvements needed to allow soccer, Admin working with Gale Assoc to review campus needs & best use and refine improvement plan
Natowich Field Lighting									2027	metal halide replacement project
Sawyer Field						\$75,000				Title 9 request from Principal
Track Facility	\$89,591								2026	Bid award to Copland [NY] scheduled for June 18, 2018, repair cracking
Tennis Courts	\$17,463		\$0						2025	completed FY19, \$38k
Practice Field [east side]		\$100,018							2034	Town of Brat, Planning Bd. passed Town review 8/29/18, start 11/2018, field use dormant 9/2018 to 8/2019. Interim Fort Dummer used. As of 11/3/18 Bellco low bid @ \$74,500. separate bid work to include irrigation for \$21k
Maintenance Shed		\$70,907	\$391,834	\$109,981					2070	30 x 60 structure, east side of Tenney Field, includes electrical infrastructure from Grandstand, Town & State requires review of project re; act250/town plan (march 2019), site work begins May2019, All Seasons Construction low bid awarded
Vehicular Systems										
Tractor Replacement									2027	Snow Removal, field maintenance
Tractor Replacement				\$0	\$40,000				2022	Field and Grounds Maintenance, anticipate closing bid November 2021, averages \$10/hr when operated

BAMS/WRCC/BUHS	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Long Term Replacement Date	Notes
Truck Replacement						\$35,000			2020	Frame has corrosion and transmission issues.
Parking lots				\$0	\$0	\$25,000			2020	completed by August 15, 2018, expensed in FY18, repeat over 3 years
Specialties										
Elevators								\$35,000	2025	Upgrade of unit installed 1992
Storage Capacity				\$0					2041	new location
Flooring										
High School					\$50,000	\$50,000	\$25,000	\$25,000	2022	Replace sections of vct tile with sheet linoleum, per shift in manufacturing, most of the buiiding
BAMS			\$0		\$185,975				2022	BAMS gym needs synthetic rubber floor [7000 sqft. @ 8/ft], installed 2004. Project completed in ssept 185975 over budget due subfloor failure of slab, excess moisture
Gymnasium-HS									2027	Main gym wood refinishing
Food service/Kitchen		\$37,575							2039	walk-in freezer, Dompier base bid \$37,575, 5/25/18, meets Eff.VT incentive, install completed August 2018.
Total Capital Expenditures	\$143,000	\$272,345	\$413,184	\$280,458	\$565,473	\$1,485,500	\$1,117,870	\$782,900	\$4,232,201	
									FY22-25	

Sources of Funds:

Operating Budget-annual appropriation-r	\$643,082	\$272,344	\$0	\$3,595	\$275,000	\$575,000	\$772,870	\$1,500,000
General Fund Transfers to Capital Fund	\$0	\$200,000		\$500,000				
Long term Debt Financing 2	\$0							
Grant Sources/Interest 3	\$0	\$404	\$5,775	\$122,726		\$785,000	\$585,000	
Subtotal Sources	\$643,082	\$472,748	\$5,775	\$626,320	\$275,000	\$1,360,000	\$1,357,870	\$1,500,000
Variance (-reduces reserve/+increase res	\$500,082	\$200,403	-\$407,409	\$345,862	-\$290,473	-\$125,500	\$240,000	\$717,100
Projected Capital Reserve Fund Balance	\$1,446,702	\$1,647,105	\$1,239,696	\$1,585,558	\$1,295,085	\$1,169,585	\$1,409,585	\$2,126,685
	audited	audited	audited	audited	estimated->			

Brattleboro Town Schools Five Year Capital Plan						Revision Date	10.14.21	Projects Subject to Board Approval		
PreK - Grade 6	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Long Term Replacement Date	Notes
Green Street School										29,013 sqft, 1924 and newer construction
Heating Systems										
Boilers	\$920,249	\$4,643							2019	2 units one original converted from coal and one from 1978 oil fired - steam
Fuel tanks & distribution									n/a	These have been removed as part of the boiler project.
Piping									2048	This is brand new 2018
Valves									2048	This is brand new 2018
Control System									2028	This is brand new 2018
Fire Protection/Systems										
Fire Panel Replacement				0					2033	replaced 2018. 2021 Call box to be
Mechanical Controls										
Unit Ventilators / AHUs			\$33,143	\$15,289					2048	building. Recently upgrades as part of 2018 boiler project. FY21 related to IAQ grant improvements in ventilation systems and
Electronic controls									2028	Heating system upgrade installed 2018
HID fixtures										
Lighting panels/Systems			\$44,274						2020	Lighting upgrade LED tech, anticipate 33kwh/month reduced to 9kwh/mo.
Emergency lighting									2030	Project completed 2016, when hallways lights upgraded to LED
Exterior lighting									2030	Upgraded to LED in 2019
Occupancy controls									2030	Upgraded to LED in 2019
Signal Systems										
Telephone										Upgraded to 911 Compliance standards
Fire alarms										Upgraded in 2016
Security alarm/devices									n/a	no security alarm at this time
Roof Systems										
Roofing				\$12,800	\$80,000	\$110,000	\$75,000	\$0	2020-2023	Engineering firm to be contacted to develop a bid specification. Steve Horton contracted in August 2021, reported roof has 5 years useful life left.
Skylight	\$17,493	\$22,835							2034	library area, bid award \$23.7k Reliable Roofing
Insulation										
Expansion/seismic joints										
Drains, gutters, etc.										Flashing, trim, snowstop, drains, gutters to be included as part of roofing project 5-year plan.

PreK - Grade 6	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Long Term Replacement Date	Notes
Flashing and trim										
Snow stops										
Exterior Wall Systems										
Facade integrity										
Brick Re-Pointing								\$40,000		Brick re-pointing, from bottom up.
Exterior Doors										Done- 2018
Window systems					\$25,000	\$25,000				Window Repair. \$20,000 This is a beginning point for a potentially very large project. Seeking estimates/consult.
Louvers and screens										
Insulation										portions of building during boiler project
Protective coating/Painting										
Ceiling system										
Grounds										
Retaining Wall	\$63,670			\$46,911					2069	Replace and extend retaining wall adjacent to Powers House, incorporate garden improvement. Front of building completed in 2018, back of building planned for 2021.
Swings/Playground			\$26,515				\$30,000		2035	fencing, install additional equipment
Vehicular Systems										
Parking lots				\$0			\$30,000		2020	front entry, east side parking
Curbs / Sidewalks										
Site Utilities										
Storm drainage										Longterms measures to be addressed with
Specialties										
Library Ceiling			\$16,202						2020	repair/replace. Tiles replaced with
Waste handling equipment										
Flooring		\$15,384								FY19 library & Office [lawton 5/3/18 bid
Painting - interior		\$1,012								[bid discussion 5/15/18]
Outdoor instruction space		\$22,634		\$8,906					2044	also will use Title 7 grant funds to stay on
Renovate Second floor										student work centers
Renovate Offices/Bathroom & Food service/Kitchen	\$4,588	\$23,916	\$25,027	\$8,494					2044	internally in July 2018 per EF and MS
Expenditures	\$1,006,000	\$90,424	\$145,161	\$92,400	\$105,000	\$135,000	\$135,000	\$40,000		
Loans:	-\$350,000									
capital reserve:	-\$30,000									
Operating Fund	\$626,000									
Offset by Grant Revenues	-\$145,000									
Net Local Cost	\$481,000									

PreK - Grade 6	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Long Term Replacement Date	Notes
Oak Grove School										30,644 SqFt 1940 and newer construction
Heating Systems										
Boilers						\$10,000	\$300,000		2044	Steam boiler oil fired retrofit, 1y23 design, fy24 install,
Fuel tanks & distribution									2025	underground 10,000 gal tank, double wall
Control System										
Mechanical Controls										
Unit Ventilators		\$4,471								
Electronic controls				\$28,916						Air Handler valves, maximize use of controler upgrade. FY21 related to Covid 19 compliance, IAQ grant, included Duct
Fire Protection/ Suppression										
Fire Panel Replacement	\$49,657								2033	Replaced 2018
Signal Systems										
Telephone										
Fire alarms		\$5,761								
Security alarm/devices		\$1,415								
Roof Systems										
Roofing-phase 1				\$9,477					2021	See Knight Engineering Report, areas 1-5 repaired in 2007 (9280sf)
Roofing-phase 2		\$4,989						\$110,000	2025	entire roof comprised of 8 sections 18,650 sqft, \$11./sqft, FY19 replace 1996 rubber, add 2"insulation, x squareft]
Roofing phase 3										Steve Horton, as of 8/1/2021, consulting engineer confirmed major roof materials good thru 2030.
Exterior Wall Systems										
Brick Re-Pointing										
Window systems					\$15,000	\$50,000				Est. 50 to 70k, FY23 Second floor replace glass block wall and lower windows with energy efficient windows and possibly insulated wall, FY23 EFCO windows 46k
Grounds										
Handicap Access Ramp						\$35,000			2042	Current HC access is in front of building with difficult access to the elevator or office
Basketball ct/play Paving						\$16,000			2042	DMI to provide estimate
Field										
Outdoor Classroom				\$6,383						Outdoor classroom with permanent structure
Swings/Playground		\$3,800								
Vehicular Systems										
Parking lots									2020	Resurface of the black top in back and front
Site Utilities										

PreK - Grade 6	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Long Term Replacement Date	Notes
Storm drainage										
Specialties										
Security Systems	\$9,060								2027	Security Camera System, completed july 2017
Asbestos				\$9,460						
Food service/Kitchen										
Expenditures	\$58,717	\$20,436	\$0	\$54,237	\$15,000	\$111,000	\$300,000	\$110,000		

PreK - Grade 6	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Long Term Replacement Date	Notes
Academy School	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Long Term Replacement Date	47,138, sqft. 1960 & newer construction
Heating Systems										
Boilers									2040	cost including design and site prep (\$375,000)
Fuel tanks & distribution								\$20,000	2025	underground 10,000 gal tank, double wall
Control system	\$8,290			\$8,500					2030	Total cost \$100,000 (\$50,000 grant funded)
Duct System Cleaning		\$13,065					\$0	\$15,000	2029	Estimated cost per Ricky, Dec 2018, added 9/20/18 KD
Unit Ventilators				\$189,670					2041	For remaining 13 original UV plan is to move to dedicated outside air handling units on roof. Working with VT Mechanical for new system design
HVAC Air handling & Control system Upgrade						\$850,000			2042	RC working with VT Engineering & Stevens Assoc to design the project which abandons UV configuration and replaces with dedicated outside air handling system with intetrated controls. RC to review new units consolidated technologies including AC/Heat/ventilation/humidity controls; https://www.modinehvac.com/products/vertical-unit-ventilators/airedale-classmate-dx-cooling-and-heat-pump/
Electronic controls										
Fire Protection/ Suppression										
Fire Panel Replacement	28,897								2033	Replaced 2018
Signal Systems										
Telephone										E-911 done spring 2019
Security alarm/devices										
Roof Systems										
Roofing									2020	replaced 1988 10,230 sqft
Roofing				\$0						Requesting evaluation, approx. 7,000 sqft, updated 4.16.21
Exterior Wall Systems										
Brick Re-Pointing										
Window systems	\$0					\$400,000			2051	Refer to All Season Bid (Aternate 9.21.21)

PreK - Grade 6	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Long Term Replacement Date	Notes
Renovation/Addition/Modular Replacement	\$0	\$11,379	\$17,237	\$133,068	\$2,000,000		\$125,000	\$125,000	2008	2.4m total project cost, 2m FY22, .4m FY23 (to complete window replacements) Replace modular / PreK classrooms 2,000 square ft, \$1.4m, consider accomodating deaf and other programs. FY21=project design phase
Grounds										
Fields										
Main Tractor									2030	Tractor purchase for snow removal/salting
Athletic fields										
Swings/Playground	\$36,596					\$75,000				Replace main structure, replace swings per insurance recommendation
Vehicular Systems										
Parking lots										See Stevens Report
Curbs / Sidewalks										
Driveway					\$45,000				2022	Restore Service Road and drive to western ave
Site Utilities										
Storm drainage										New sewer and septic plan required. Unsure of requirements but changes will be necessary. State of VT info. to be released Dec. 2019.
Specialties										
Food service/Kitchen										
Cafeteria Tables				\$13,925						12 total tables need to be replaced. Quote from WB Mason- Becky Dion. bid received 4.16.21
LED lighting upgrade				\$0						in all classrooms- approx. \$900 per classroom
Carpet replacement				\$0		\$9,000				Music program
Classroom countertops					\$12,000					Countertops and sinks will need to be tested for asbestos before replacement in certain classrooms
Rock wall removal										
Gym Ceiling Replacement					\$40,000					12x12 acoustic tiles needed. Install is probably similar to GSS Library. Per RC, consider air distribution at ceiling level
Academy Total Capital	\$73,783	\$24,444	\$17,237	\$345,162	\$2,097,000	\$1,334,000	\$125,000	\$160,000		

PreK - Grade 6	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Long Term Replacement Date	Notes
Other - Esteyville, Powers House and Canal Street Heating Systems	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Long Term Replacement Date	Canal 9,064 sqft, 1935 Esteyville 2,144 sqft, 1872 Powers House 3,171 sqft, 1903 est.
Boilers- Esteyville									2040	Total cost \$36,000 (\$16,000 grant funded)
Boiler -Canal Street					\$45,000				2009	Review due for replacement -verify, consider
Boiler-Powers House										review oil boiler install date,
Fuel tanks & distribution									2013	removed Nov.2015
									2025	underground 5,000 gal tank, double wall-
										1, tank in garage, 1 tank in basement, @275
Control System										
Mechanical Controls										
Unit Ventilators				\$1,011						
Electronic controls										
Signal Systems										
Fire alarms										
Security alarm/devices										
Roof Systems										
Canal Street									1996	to bell tower section
Esteyville										Review annual repair
Powers House		\$0		\$0	\$25,000				2046	chimney
Exterior Wall Systems										
Brick Re-Pointing										Canal Stone façade
Window systems										
Grounds										
Trees										Crowell lot -see plan
Retaining walls										front and rear retaining walls
Specialties										
Food service/Kitchen										
Other Buildings Total	\$0	\$0	\$0	\$1,011	\$70,000	\$0	\$0	\$0		
Total Brat.Town Schools	\$1,138,500	\$135,304	\$162,398	\$492,809	\$2,287,000	\$1,580,000	\$560,000	\$310,000		
Estimated Actual										
Sources of Funds:		\$4								
Operating Budget-annual	\$539,717	\$135,303	\$149,703	\$56,371	\$285,000	\$585,000	\$500,000			
General Fund Transfers to		\$346,698	\$293,213	\$1,227,629						
Long term Debt Financing 2	\$0									review, contingent upon Bond funded Project
Grant Sources/Interest 3	\$145,000	\$180		\$267,169	\$1,385,000	\$935,000				
Subtotal Sources	\$684,717	\$482,181	\$442,916	\$1,551,169	\$1,670,000	\$1,520,000	\$500,000			
Variance (-reduces	-\$453,783	\$346,877	\$280,518	\$1,058,359	-\$617,000	-\$60,000	-\$60,000			
Projected Capital Reserve	\$55,119	\$401,996	\$682,514	\$1,740,873	\$1,123,873	\$1,063,873	\$1,003,873			

Dummerston School

Revision Date 1.14.2022

Dummerston School	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Long Term Replacement Date	Notes
PreK-Grade 8 Heating Systems										31,000 sqft, 1974 & 1994 additions
Boilers					\$350,000				2041	Bid award in June 2021 to Froling Energy, 2 P100 Froling boilers, includes control upgrades, new VFD pumps, replacement domestic water tank, expected completion October 2021. Commissioning scheduled for ??
Back-up Boiler				\$41,518					2040	Replaced 1978 boiler, will serve as backup system
Heating Fuel tanks & distribution						\$50,000			2024	Dan to receive proposal in Nov 2021
AHU #2 relocate & replace					\$180,000				2023	Relocate exiting AHU to roof to provide 3rd grade and assoc wing for heat, air supply, exhaust.
Piping									2041	Major upgrades to heating system completed with boiler replacement project
Valves									2041	Major upgrades to heating system completed with boiler replacement project
Control System	\$38,333			\$10,091					2031	Former 2017 Alliance Mechanical system upgraded to Niagra controller system integrated with District Server at BUHS, CTI is the control contractor, part of boiler upgrade project in 2021
Fire Protection/Systems										
Fire Panel Replacement							\$30,000		2024	Ingram construction of front office reconfig will review fire panel
Mechanical Controls & Lighting										
Exhaust fans				\$11,115		\$10,000			2030	FY 21 improvements related to Covid compliance, funded by IAQ grant, FY23 to be reviewed
Non-HVAC Electronic controls										
HID fixtures										
Lighting panels/Systems					\$7,000	\$7,000			2031	Reviewed project cost with efficiency Vermont, completed in July 2021, LED fixtures in Gym, replaced old ballasts T8bulbs
Emergency lighting										
Exterior lighting										
Occupancy controls										
Wiring, conduits, & distribution panels, Transformers						\$20,000			2023	Gym, Maintenance closet, breaker boxes need to be replaced
Signal Systems										
Telephone					\$5,000				2036	S VT Telephone, panasonic system

Dummerston School	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Long Term Replacement Date	Notes
Security alarm/devices						\$5,000				Upgraded to a DVR system, need to replace analog system
Roof Systems										
Roofing				\$19,515						scheduel
Ceiling system							\$40,000		2025	Replace suspended ceiling elemenary hallway with hard surface
Grounds										
Soccer Field Improvement										
Swings/Playground					\$35,000	\$25,000			2052	Adam Hubbard landscape design working on plan , 3 year phase in project development, Anticipate funding support from Community Groups
Vehicular Systems										
Parking lots	\$19,300	\$0							2044	front entry area, J Evans Construction
Curbs / Sidewalks/Grounds Access							\$60,000		2045	Paving, excavating & general grading of road way provide acces to playground area.
Site Utilities										
Storm drainage										Septic system pump replacement est 10k fy22
Specialties										
Septic & Sanitary Systems					\$8,650		\$20,000		2045	septic pump replacement in 2025, controls replaced in 2021
Waste handling equipment										
Flooring						\$10,000	\$10,000		2021	phased replacement, K & intensive svcs.
Cafeteria Tables					\$40,000				2022	replacement
PreK Renovation									2040	
Food service/Kitchen					\$20,000				2031	FY22 dishwasher, prep & hand sink, freezer, refridgerator
Bathrooms										
Total Capital Plan Acquisitions	\$57,633	\$0	\$0	\$82,240	\$645,650	\$127,000	\$160,000	-		1,014,890
Estimated Actual										5 year cumulative totals
Sources of Funds:										
Operating Budget-annual appropriation	\$57,633			\$0	\$75,000	\$75,000	\$150,000			
General Fund Transfers to Capital Fun	\$0									
Long term Debt Financing 2	\$0									
Grant Sources 3	\$0			\$21,206	\$562,405		\$60,000			
Subtotal Sources	\$57,633	\$0	\$0	\$21,206	\$637,405	\$75,000	\$210,000			
Variance (-reduces reserve/+increase re	\$0	\$0	\$0	-\$61,033	-\$8,245	-\$52,000	\$50,000			
Projected Capital Reserve Fund Balanc	\$1,245	\$1,245	\$1,245	-\$59,788	-\$68,033	-\$120,033	-\$70,033			
	audited	audited	audited	estimated->						

Guilford School

Revision Date 10.14.21

Projects Subject to Board Approval

Guilford School	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Long Term Replacement Date	Notes
PreK-Grade 6										
Heating Systems										
Boilers	\$253,625								2048	Controls
Fuel tanks & distribution									2048	Outside tank, Karosene
Piping										
Valves										
Control System									2028	Design
Fire Protection/Systems										
Fire Panel Replacement										
Mechanical Controls & Lighting										
Unit Ventilators				\$181,290	\$165,000				2040	FY21, 11 UV replaced per Covid19 guidance, funded by IAQ grant. 8, 1958 units remain, planed to be replaced in FY22, project will include retrofiting 11 newunits new controlser that are compatible with all 19 units. RC will reserach alternative technology: https://www.modinevac.com/products/vertical-unit-ventilators/airedale-classmate-dx-cooling-and-heat-pump/
Electronic controls		\$27,397				\$15,000				integrate with building management server
HID fixtures										
Lighting panels/Systems									1988	
Emergency lighting									1988	
Exterior lighting										
Occupancy controls										
Wiring, conduits, & distribution panels,										
Signal Systems										
Telephone										
Fire alarms									2035	
Security alarm/devices									1996	
Roof Systems										
Roofing				\$59,850			\$60,000		2045	July 2020 project, details. Entire building was done in 06-07 except cafe, library, and 1988 pitched roof. 15 year warranty.
Skylight										
Insulation										R value unknown. When replacing- flat roof add insulation to bring R value to 50, Bring pitched roof to R-30
Expansion/seismic joints										
Exterior Wall Systems										
Facade integrity										

Brick Re-Pointing										
Exterior Doors										
Window systems					\$50,000	\$50,000	\$100,000		2022	provide location and # of units
Louvers and screens										
Insulation										
Protective coating/Painting										
Ceiling system										
Grounds										
Soccer Field Improvement										
Swings/Playground										
Vehicular Systems										
Parking lots										front entry area
Flooring										Gym floor was installed 2010
PreK Renovation										
Food service/Kitchen										
Total Capital Plan Acquisitions	\$253,625	\$27,397	\$0	\$241,140	\$215,000	\$65,000	\$160,000	\$0		<u>681,140</u>
Estimated Actual										5 year cumulative totals
Sources of Funds:										
Operating Budget-annual appropriation-	\$158,625		\$30,000	\$0	\$53,085	\$0	\$75,000	\$75,000		
General Fund Transfers to Capital Fund				\$30,000		\$30,000				
Long term Debt Financing 2	\$0									
Grant Sources 3	\$95,000			\$181,290	\$160,000	\$50,000				
Subtotal Sources	<u>\$253,625</u>	<u>\$0</u>	<u>\$30,000</u>	<u>\$211,290</u>	<u>\$213,085</u>	<u>\$80,000</u>	<u>\$75,000</u>	<u>\$75,000</u>		
Variance (-reduces reserve/+increase res	\$0	-\$27,397	\$30,000	-\$29,850	-\$1,915	\$15,000	-\$85,000	\$75,000		
Projected Capital Reserve Fund Balance	\$84,312	\$56,915	\$86,915	\$57,065	\$55,150	\$70,150	-\$14,850	\$60,150		
	audited	audited	audited	estimated->						

Putney Central School

Revision Date 10.14.21

Projects Subject to Board Approval

Putney Central School	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Long Term Replacement Date	Notes
PreK-Grade 8										
Heating Systems										
Boilers		\$75,742							2048	replaced ACT boiler, upgraded controls
Fuel tanks & distribution										
Piping										
Valves										
Control System									2028	upgraded hvac controls concurrent with Froling boiler upgrade, see commissioning report Sept 2019
Fire Protection/Systems										
Fire Panel Replacement										
Mechanical Controls & Lighting										
Unit Ventilators / AHU				\$5,186						HRV east wing to meet ASHRAE code per Covid guidance, funded by IAQ grant
Electronic controls				\$2,790					2028	Control sequencing to meet ASHRAE guidance, funded by IAQ grant
HID fixtures										
Lighting panels/Systems										
Emergency lighting										
Exterior lighting										
Occupancy controls										
Wiring, conduits, & distribution panels,										
Signal Systems										
Telephone		\$5,050							2027	
Fire alarms										
Security alarm/devices					\$3,000					
Roof Systems										
Roofing	\$67,810		\$9,997		\$15,000		\$80,000		2041	Section replaced 2016, section replaced 2018, section 2020. Both "pod" and gym roofs will need replacing soon. Multiple, short-term repairs have been performed on both. Estimate \$50-75K for gym, \$25-35K for pod roof, which should be replaced sooner rather than later.
Skylight										
Insulation										
Expansion/seismic joints										
Drains, gutters, etc.										

Putney Central School	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Long Term Replacement Date	Notes
Flashing and trim					\$6,000					Sills in glass hallway area should be replaced asap. Significant degradation of the sill materials (PT wood?) is present. Estimate \$6K. Water damage to siding on "pod" classroom is getting worse as time goes on, and so should be remediated as soon as possible in order to avoid more extensive/expensive repairs. Estimate \$5000. Vertical trim on sides of middle school doors is rotted and should be replaced. Estimate \$2500.
Snow stops										
Exterior Wall Systems										
Resheathing grade 4/5							\$10,000			structure
Brick Re-Pointing										
Exterior Doors					\$15,000					10 middle school doors should be replaced with insulated units that have smaller glass sections. Estimate \$1500 each. Double doors into gym (2) should be replaced with more energy-efficient units. Estimate \$2500 each.
Window systems							\$70,000		2024	sill rot, glass degradation, poor thermal conditions
Louvers and screens										
Insulation										
Protective coating/Painting										
Ceiling system										
Grounds										
Green house Farm to School						\$15,000			2033	Infrastructure to support student engagement in farm to school programming, integrated fridge/freezer, School Gardens
Swings/Playground						\$0	\$50,000			Playground needs upgrade. Borders need replacement. Estimate \$25K+ for border work; additional \$25K-? for playground equipment. Both PK and K-5 playgrounds require permanent, structural shaded areas. Estimate \$5K each.
Outdoor learning spaces					\$15,000	\$75,000				Based on our experience with outdoor classrooms in the forest, an on-campus program aimed at gradually building out exterior classrooms/semi-permanent shelters, Greenberg schematic. \$15k each
Vehicular Systems										
Parking lots									2032	front entry area
Curbs / Sidewalks										
Site Utilities										
Storm drainage										
Specialties										

Putney Central School	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Long Term Replacement Date	Notes
Library Ceiling										
Waste handling equipment										
Flooring										
Painting - interior										
Bathroom		\$4,104								
Forest Conservation		\$15,000								
PreK Renovation										
Walk in Freezer				\$13,972						
Recable school for WAP-VOIP				\$30,212						
Food service/Kitchen		\$26,922							2039	Walkin Freezer & Shed
Total Capital Plan Acquisitions [Gene	67,810	126,818	9,997	52,159	54,000	90,000	210,000	-		<u>406,159</u>
Estimated Actual										5 year cumulative totals FY21-25
Sources of Funds:										
Operating Budget-annual appropriation-	-	16,848			50,000	70,000	50,000	50,000		
General Fund Transfers to Capital Fund										
Long term Debt Financing 2	-	401								
Grant & Interest Sources 3	321	26,922		38,188		40,000				
Subtotal Sources	321	44,171	-	38,188	50,000	110,000	50,000	50,000		
Variance (-reduces reserve/+increase res	(67,489)	(82,647)	(9,997)	(13,972)	(4,000)	20,000	(160,000)	50,000		
Projected Capital Reserve Fund Balance	92,644	9,997	0	(13,971)	(17,971)	2,029	(157,971)	(107,971)		
	audited	audited	audited	estimated->						