	Fort River Elementary School									
	Amherst, MA Architect: DiNisco Design									
	OPM: Anser									1
	January 19, 2023	Team								
	SCHEN	Impact				SBC Decision				
	Value Engineering Options	Description / Impact	Direct Cost	Total Deduct (incl 29% markups)	Yes / No / Potential	Design	Program Sustainabilty	Ops	Accepted	
	Replace concrete paving with bituminous paving	Concrete sidewalks leading to and around the building become bituminous (black top)	\$165,919	\$214,036	Yes	Х		х	\$214,036	YES
	Eliminate vertical curb at west side of parking lot	no curbing at west side. Snow removal easier, but vehicles not contained	\$27,000	\$34,830	Potential			X	\$0	
	Delete Bluestone at Rain Gardens	Replace with gravel. Maintains stormwater functionality of the raingarden. Accesibility as an educational space is neutral.	\$158,816	\$204,873	Yes	X			\$204,873	YES
	Delete unit pavers replace with conrete	Concrete walk replaces unit pavers at main entry. Unit pavers in play area replaced with bituminous.	\$82,900	\$106,941	Yes	X			\$106,941	YES
	Town accepts excess fill from site	Estimate assumes general contractor pays disposal fee for surplus materials removed from site. If surplus material to be property of the town only trucking costs incurred.	\$305,400	\$393,966	Yes			x	\$393,966	YES
	Lower first floor elevation and south end of site 1'	Lowers first floor elevation from 178' to 177' resulting in floor elevation above groundwater range from 3' to 6'	\$124,964	\$161,204	No	Х			\$0	
	Delete one full size basketball court	Assumes eliminating 1 full size basketball court and replacing with equal area of grass	\$42,900	\$55,341	No		х		\$0	
	Delete playsurface between play structures	Replace with grass	\$210,000	\$270,900	Np		х		\$0	
SITE	Delete Birdhouses	Nice element for outdoor learning but not required. Birdhouses could be a student project.	\$5,000	\$6,450	Yes		x		\$6,450	YES
	Community Fields amenities	Above surface amenities such as Backstops,bases, infield, safety netting, benches, fences, etc.	\$127,625	\$164,636	Yes				\$164,636	YES
	Reduce parking spaces	Approximately \$ 1,000 per space			No		x		\$0	
	Replace vertical granite curb with precast concrete curb at play areas.	Change of curb material in play areas	\$11,055	\$14,261	Potential			x	\$14,261	YES
	Replace vertical granite curb with cap cod berm at parking areas and drive lanes	Change of curb material in plarking and drive areas	\$103,544	\$133,572	Potential			X	\$133,572	YES
	Reduce Plexi pave to game lines only	Reduces area of color on blacktop play areas to game lines only	\$115,799	\$149,381	Yes	X			\$149,381	YES
	15% reduction in bituminous paving area	Reduction in paved paths around building, requires layout and material changes	\$95,352	\$123,004	Yes	x			\$123,004	YES
	NEW / ADDED POTENTIAL ITEMS TO CONSIDER									
	Reduce Planters, Benches, Logs	Reduce a portion - Approximately 30-40%	\$67,350	\$86,882					\$0	
	Reduce Stone Boulders	Reduce a portion of boulders - currently 55 at \$1,000 each							\$0	
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	Eliminate phenolic rainscreen and replace with cast stone units	Visual contrast can be maintained with a less expensive surface material	\$212,130	\$273,648	Yes	х			\$273,648	YES
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	Fort River Elementary School Amherst, MA									
+	Architect: DiNisco Design									
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	January 19, 2023									
	SCHEMATIC DESIGN PHASE Team Recommended									SBC Deci
Val	alue Engineering Options	Description / Impact	Direct Cost	Total Deduct (incl 29% markups)	Yes / No / Potential	Design	Program Sustainabilty	Ops	Accepted	
	Reduce overhang /roof line depth at media center and administration 50%	Slight change in the look. No impact to shading. On second floor on the North side of building	\$151,661	\$195,643	Yes	х			\$195,643	YES
	Reduce mechanical screen wall 50%	Aesthetics only, some equipment will be visable from the bus drop off loop	\$116,496	\$150,280	Yes	X			\$150,280	YE
	Delete horizontal accent mullions on exerior curtainwall	Aesthetic change to curtainwall framing to cafeteria, media center and gym	\$57,270	\$73,878	Yes	Х			\$73,878	YE
	Replace Spandrel glass at Media center and Cafeteria with single skin metal panel	Slight change in the look. Overall material contrast will be maintained.	\$47,700	\$61,533	Yes	X			\$61,533	YE
	Replace composite metal panel at music room with single skin metal panel	Slight change in the look. Overall material contrast will be maintained.	\$48,950	\$63,146	Yes	X			\$63,146	YE
	Replace composite metal panel canopy and soffit fascia with break metal	Slight change in the look. Overall material contrast will be maintained.	\$124,460	\$160,553	Yes	X			\$160,553	YE
	Replace preformed roof edge with brake metal	Included in above	\$0	\$0		X			\$0	
	Replace all composite panel with single skin metal panel	Additive to above. Slight change in the look. Overall material contrast will be maintained.	\$70,820	\$91,358	Yes	Х			\$91,358	YE
	Replace glazing @ Gym clerestory with Polycarbonate Panels (Kalwal)	Do not recommend. Polycarbonate panels deteriotates under UV with time			No	X			\$0	
	Replace curtainwall at single story exterior walls with windows	Do not recommend based upon the size of the window openings			No	X			\$0	
	Reduce first floor floor-to-floor elevation to 14'-8" from 16'	Reduction of floor-to-floor height reduces volume. Reduces exterior wall area (including windows), reduces interior partition area. Net effect is reduction in floor-to-ceiling height approximately 8"-16" depending on location. Greatest impact would be cafeteria	\$273,163	\$352,380	Yes	X		х	\$352,380	YE
	Reduce curtainwall at gym by 30% / replace with GFCMU	Aesthetic change. Ample light remains in gym.	\$14,229	\$18,355	Yes	X			\$18,355	YI
	Replace precast concrete wall base where located in selected locations on first floor with GFCMU	Aesthetics only.	\$52,125	\$67,241	Yes	X			\$67,241	Y
	Eliminate wood shiplap panels at Project Area portals. Replace with abuse resistant GWB, painted	Aesthetic change, not as durable	\$53,350	\$68,822	No	X		X	\$0	
	Reduce wood shiplap panels by 50% at Project Area portals. Replace with abuse resistant GWB, painted	Aesthetic change but maintains wainscott for durability	\$26,675	\$34,411	Yes	X			\$34,411	Y
	Replace wood cabinets over student lockers @ Project Areas with P-Lam (wood grain)	Aesthetic change	\$36,270	\$46,788	Yes	X			\$46,788	Y
	Reduce storefront at library interior entrance 50%	Reduces the amount of glazing at the corridor entrance into the library. Replace with solid wall.	\$15,680	\$20,227	Yes	X			\$20,227	Y
	Replace storefront at Library Interior walls with HM frames	Maintains glazed area. Replaces aluminum framing with painted hollow metal frames. Cannot be used in conjunction with above (if want to reduce this value by 50%)	\$1,105	\$1,425	No	X			\$0	
	Eliminate ceramic tile wainscot @ all Academic Corridors, replace with abuse resistant GWB	Aesthetic change, not as durable. High traffic areas suspectible to dings, scuff marks, etc. Would increase maintenance (re-painting)	\$144,284	\$186,126	No	X		х	\$0	
	Reduce ceramic tile wainscot from 5' to 3'-6" @ all Academic Corridors, replace with abuse resistant GWB	Aesthetic change, not as durable but 3'-6" height provides reasonable protection. High traffic areas suspectible to dings, scuff marks, etc. Would increase maintenance (re-painting)	\$43,285	\$55,838	Yes	X		X	\$55,838	Y
	Replace phenolic panel system @ lobby with veneer wood paneling	Material change only. Similar design intent remains	\$25,380	\$32,740	Yes	X			\$32,740	Y
	Replace phenolic panel system @ cafeteria with veneer wood paneling	Material change only. Similar design intent remains. If replace at lobby, strongly recommend changing it at this location	\$13,640	\$17,596	Yes	X			\$17,596	Y
	Replace fire rated glass at central stair with standard glazing in hollow metal frames with deluge sprinklers	Maintains borrowed light from stairwell. Allowed under previous codes, requires approval by AHJ.	\$262,140	\$338,161	Yes	X			\$338,161	١

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Displace of the content of proteins of carried and system as considers of the inflamatant, method of displaying student and TID 47.77 70.0 70	Oelste recessed pitture rail system at controllers # Imministed, method of displaying student and TBD Oelste control tile colling. Replace word stage floor with Lindowan project areas with light fixtures Anothericis. Anothericis. Anothericis. Anothericis. Anothericis. Anothericis. Anothericis. Anothericis. Anotherici	3UILDI		Delete full height ceramic wall tile at multi fixture toilets to 5'-2" wainscot	Aesthetics. Upper wall will require re-painting.	\$73,386	\$94,668	Yes	X		х	\$94,668	YES
Assistance of the project areas and project areas. Peplace with light fixtures to reduce the vertical scale of the project areas and project areas. And the vertical scale of the project areas and project areas by 40%. Replace wood stage floor with Linoleum (Treads, Risers, and Agron to remain wood). Assistance are all the project areas and project areas by 40%. Replace with simple transforms between classrooms and project areas by 40%. Assistance are all the project areas. Assistance are all the project areas. Belace with simple transforms between classrooms and project areas by 40%. Assistance with simple transforms between classrooms in project areas. Peplace with project areas. Assistance area of the project area of the project area of the project area. Assistance area of the project area. Assistance area of the project	Assistance in the centing accounts (like centing) Assistance. Use period metal (clouds) at project areas / replace with light fixtures and explaint light fixtures to reduce the vertical scale of the project areas status of \$157,000 and \$1	_			If eliminated, method of displaying student art TBD	\$29,250	\$37,733	Yes	X	Х		\$37,733	YES
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Reduce interior lighting fixtures quantity / scope by 10%. Reduce pedestrian site lighting around play structures by 10%. Reduce site lighting at roadway and parking lot by 10%. Reduce site lighting levels A design progresses there will be opportunity to reduce the amount of lighting levels Secondary electric service feeders from parking lot by 10%. Reduce site lighting levels A perved by the Massachusetts Electrical Code section 310.14 Size, 500 Size, 5	(touch) fixtures Install a valve station at each room and only run (2) pipes to each chilled beam rather than (4) pipes. There will stell be (4) pipes down the corridors. Reduce interior lighting fixtures quantity / scope by 10%. Reduce interior lighting around play structures by 10%. Reduce site lighting around play structures by 10%. Reduce site lighting at roadway and parking lot by 10%. Reduce site lighting at roadway and parking lot by 10%. Change main switchboard to 3000A from 4000A. Secondary electric service feeders from pad mounted transformer – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Remove athletic field ductbanks J-J, K-K, L-L. PVC condults will be direct buried rather than concrete encased. Secondary light impact Secondary selectric field ductbanks system from street. Feed future athletic field and There is a maximum of eight conduits that can enter the transformer. Might impact Secondary selectric field ductbanks system from street. Feed future athletic field and There is a maximum of eight conduits that can enter the transformer. Might impact Secondary electric field ductbanks system from street. Feed future athletic field and There is a maximum of eight conduits that can enter the transformer. Might impact Secondary selectric field ductbanks system from street. Feed future athletic field and There is a maximum of eight conduits that can enter the transformer. Might impact Secondary selectric field ductbanks system from street. Feed future athletic field and There is a maximum of eight conduits that can enter the transformer. Might impact Secondary selectric field ductbanks system from street. Feed future athletic field and			Delete 12 lockers at project areas outside SE classrooms	Reduces total locker count from 864 to 720	\$45,360	\$58,514	Yes		x		\$58,514	YES
Reduce interior lighting around play structures by 10%. Reduce pedestrian site lighting around play structures by 10%. Reduce site lighting at roadway and parking lot by 10%. Reduce site lighting at roadway and parking lot by 10%. Reduce site lighting at roadway and parking lot by 10%. Reduce site lighting at roadway and parking lot by 10%. Reduce site lighting at roadway and parking lot by 10%. Reduce site lighting at roadway and parking lot by 10%. As design progresses there will be opportunity to reduce the amount of lighting structures by 10%. Reduce site lighting at roadway and parking lot by 10%. As design progresses there will be opportunity to reduce the amount of lighting structures by 10%. As design progresses there will be opportunity to reduce the amount of lighting structures by 10%. As design progresses there will be opportunity to reduce the amount of lighting structures by 10%. As design progresses there will be opportunity to reduce the amount of lighting structures by 10%. As design progresses there will be opportunity to reduce the amount of lighting structure will be apportunity to reduce the amount of lighting structures by 10%. Reduce site lighting at roadway and parking lot by 10%. As design progresses there will be opportunity to reduce the amount of lighting structure will be desired lighting levels Sec. on the structure of the structure of the structure structu	than (4) pipes. There will still be (4) pipes down the corridors. Spaces will continue to be able to heated or cooled individually. Reduce interior lighting fixtures quantity / scope by 10%. As design progresses there will be opportunity to reduce the amount of lighting fixtures upon the desired lighting levels Reduce pedestrian site lighting around play structures by 10%. As design progresses there will be opportunity to reduce the amount of lighting fixtures upon the desired lighting levels Reduce site lighting at roadway and parking lot by 10%. As design progresses there will be opportunity to reduce the amount of lighting fixtures upon the desired lighting levels As design progresses there will be opportunity to reduce the amount of lighting fixtures upon the upon the desired lighting levels As design progresses there will be opportunity to reduce the amount of lighting structures upon the upon	NICAL		•	Operationally preferred over electronically controlled (sensor) fixtures	\$27,045	\$34,888	Yes			х	\$34,888	YES
Reduce pedestrian site lighting around play structures by 10%. Reduce pedestrian site lighting around play structures by 10%. Reduce site lighting around play structures by 10%. Reduce site lighting around play structures by 10%. As design progresses there will be opportunity to reduce the amount of lighting levels Reduce site lighting at roadway and parking lot by 10%. As design progresses there will be opportunity to reduce the amount of lighting levels Change main switchboard to 3000A from 4000A. 3000A feeders are specified and what is required Secondary electric service feeders from pad mounted transformer – use aluminum feeders and parking levels and parking levels Generator electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Can provide appropriate systems at a savings Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use a	Reduce pedestrian site lighting around play structures by 10%. Reduce site lighting at roadway and parking lot by 10%. Reduce site lighting at roadway and parking lot by 10%. As design progresses there will be opportunity to reduce the amount of lighting fixtures while maintaining the desired lighting levels Reduce site lighting at roadway and parking lot by 10%. As design progresses there will be opportunity to reduce the amount of lighting fixtures while maintaining the desired lighting levels Change main switchboard to 3000A from 4000A. 3000A feeders are specified and what is required Secondary electric service feeders from pad mounted transformer – use aluminum feeders in lieu of copper Generator electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Gym and cafeteria sound systems – Simplify the systems. Currently estimated at \$75,000 and \$85,000 Remove concrete encasement from generator ductbanks J-J, K-K, L-L. PVC conduits will be direct buried rather than concrete encased. There is a maximum of eight conduits that can enter the transformer. Might impact S12,500 S10,320 Yes X X X S10,320 Yes X S10,320 Yes X X X S10,320 Yes X X X S10,320 Yes X X X S	МЕСНА				\$457,000	\$589,530	Yes			x	\$589,530	YES
Reduce site lighting at roadway and parking lot by 10%. Reduce site lighting at roadway and parking lot by 10%. As design progresses there will be opportunity to reduce the amount of lighting systems of the maintaining the desired lighting levels Change main switchboard to 3000A from 4000A. 3000A feeders are specified and what is required Secondary electric service feeders from pad mounted transformer – use aluminum feeders in lieu of copper Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders from pad mounted transformer – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders from pad mounted transformer – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders from pad mounted transformer – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders from pad mounted transformer – use aluminum feeders Approved by the Massachuse	Reduce site lighting at roadway and parking lot by 10%. Reduce site lighting at roadway and parking lot by 10%. As design progresses there will be opportunity to reduce the amount of lighting \$24,470 \$31,566 Yes X X X X \$31,566			Reduce interior lighting fixtures quantity / scope by 10%.		\$112,106	\$144,617	Yes	X		х	\$144,617	YES
Change main switchboard to 3000A from 4000A. Secondary electric service feeders from pad mounted transformer – use aluminum feeders in lieu of copper Generator electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Mass	Change main switchboard to 3000A from 4000A. Secondary electric service feeders from pad mounted transformer – use aluminum feeders in lieu of copper Generator electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Secondary electric service feeders – use aluminum feeders Approved by the Mass			Reduce pedestrian site lighting around play structures by 10%.		\$8,000	\$10,320	Yes	х		x	\$10,320	YES
Secondary electric service feeders from pad mounted transformer – use aluminum feeders in lieu of copper Generator electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 S12,500 S16,125 No X S0 Generator electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 S28,656 S36,966 No X S0 Gym and cafeteria sound systems – Simplify the systems. Currently estimated at \$75,000 and \$85,000 Remove concrete encasement from generator ductbanks J-J, K-K, L-L. PVC conduits will be direct buried rather than concrete encased. S13,312 S40,392 Yes X S40,392 Remove athletic field ductbank system from street. Feed future athletic field and concession stand from transformer for parking lot PV and EVCS. Delete electric hand dryers from multi-fixture and staff bathrooms Replace with paper towel dispensers S43,797 S56,498 No X S88,337 Yes X S88,337 Yes X S88,337	Secondary electric service feeders from pad mounted transformer – use aluminum Approved by the Massachusetts Electrical Code section 310.14 \$12,500 \$16,125 No X \$0 \$16,125 No			Reduce site lighting at roadway and parking lot by 10%.		\$24,470	\$31,566	Yes	X		X	\$31,566	YES
Generator electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 Sequence of Signature of Signature (Code section 310.14) Gym and cafeteria sound systems – Simplify the systems. Currently estimated at \$75,000 and \$85,000 Remove concrete encasement from generator ductbanks J-J, K-K, L-L. PVC conduits will be direct buried rather than concrete encased. Remove athletic field ductbank system from street. Feed future athletic field and concession stand from transformer for parking lot PV and EVCS. Delete electric hand dryers from multi-fixture and staff bathrooms Replace with paper towel dispensers Approved by the Massachusetts Electrical Code section 310.14 \$28,656 \$36,966 No X X \$90,300 Yes X \$40,392 Yes X \$40,392 Yes X \$88,337	feeders in lieu of copper Approved by the Massachusetts Electrical Code section 310.14 Generator electric service feeders – use aluminum feeders Approved by the Massachusetts Electrical Code section 310.14 \$28,656 \$36,966 No X \$0 Gym and cafeteria sound systems – Simplify the systems. Currently estimated at \$75,000 and \$85,000 Remove concrete encasement from generator ductbanks J-J, K-K, L-L. PVC conduits will be direct buried rather than concrete encased. \$31,312 \$40,392 Yes X \$40,392 Yes X \$88,337 Yes Yes Yes Yes Yes Yes Yes Ye			Change main switchboard to 3000A from 4000A.	3000A feeders are specified and what is required	\$65,000	\$83,850	Yes			×	\$83,850	YES
Remove concrete encasement from generator ductbanks J-J, K-K, L-L. PVC conduits will be direct buried rather than concrete encased. \$31,312 \$40,392 Yes X \$40,392 Remove athletic field ductbank system from street. Feed future athletic field and concession stand from transformer for parking lot PV and EVCS. Delete electric hand dryers from multi-fixture and staff bathrooms Replace with paper towel dispensers Replace with paper towel dispensers PVC conduits will be direct buried rather than concrete encased. \$31,312 \$40,392 Yes X \$40,392 Yes X \$88,337 Yes X \$88,337 Yes X \$88,337 Yes X \$88,337	Gym and cafeteria sound systems – Simplify the systems. Currently estimated at \$75,000 and \$85,000 \$90,300 Yes X X \$90,300 YE Remove concrete encasement from generator ductbanks J-J, K-K, L-L. PVC conduits will be direct buried rather than concrete encased. \$31,312 \$40,392 Yes X X \$40,392 YE Remove athletic field ductbank system from street. Feed future athletic field and There is a maximum of eight conduits that can enter the transformer. Might impact \$88,478 \$88,337 Yes				Approved by the Massachusetts Electrical Code section 310.14	\$12,500	\$16,125	No			х	\$0	
Remove concrete encasement from generator ductbanks J-J, K-K, L-L. PVC conduits will be direct buried rather than concrete encased. \$31,312 \$40,392 Yes X \$40,392 Remove athletic field ductbank system from street. Feed future athletic field and concession stand from transformer for parking lot PV and EVCS. Delete electric hand dryers from multi-fixture and staff bathrooms Replace with paper towel dispensers Replace with paper towel dispensers PVC conduits will be direct buried rather than concrete encased. \$31,312 \$40,392 Yes X \$40,392 Yes X \$88,337 Yes X \$88,337 Yes X \$88,337 Yes X \$88,337	\$75,000 and \$85,000 Remove concrete encasement from generator ductbanks J-J, K-K, L-L. PVC conduits will be direct buried rather than concrete encased. \$31,312 \$40,392 Yes X \$40,392 YE Remove athletic field ductbank system from street. Feed future athletic field and There is a maximum of eight conduits that can enter the transformer. Might impact \$88,478 \$88,337 Yes YESS 177 Yes \$1 \$1,000 \$90,300 YES \$40,392 YES \$40,392 YES \$40,392 YES \$88,337 Yes \$88,337 Yes \$88,337 Yes \$88,337 Yes	TRICA		Generator electric service feeders – use aluminum feeders	Approved by the Massachusetts Electrical Code section 310.14	\$28,656	\$36,966	No			x	\$0	
Remove athletic field ductbank system from street. Feed future athletic field and concession stand from transformer for parking lot PV and EVCS. There is a maximum of eight conduits that can enter the transformer. Might impact future loads on transformer. Might impact seem to see the concession stand from transformer for parking lot PV and EVCS. Replace with paper towel dispensers \$43,797 \$56,498 no X \$0	Remove athletic field ductbank system from street. Feed future athletic field and There is a maximum of eight conduits that can enter the transformer. Might impact \$68,478 \$88,337 Ves Very 100 Very	ELEC			Can provide appropriate systems at a savings	\$70,000	\$90,300	Yes	Х	х		\$90,300	YES
concession stand from transformer for parking lot PV and EVCS. Delete electric hand dryers from multi-fixture and staff bathrooms Replace with paper towel dispensers \$43,797 \$56,498 no X \$00				Remove concrete encasement from generator ductbanks J-J, K-K, L-L.		\$31,312	\$40,392	Yes			х	\$40,392	YES
	concession stand from transformer for parking lot PV and EVCS. future loads on transformer					\$68,478	\$88,337	Yes			х	\$88,337	YES
	Delete electric hand dryers from multi-fixture and staff bathrooms Replace with paper towel dispensers \$43,797 \$56,498 no X \$0			Delete electric hand dryers from multi-fixture and staff bathrooms	Replace with paper towel dispensers	\$43,797	\$56,498	no			х	\$0	
Reduce quantity of CCTV interior cameras Per School Committee policy \$60,000 \$77,400 Yes \$77,400	Reduce quantity of CCTV interior cameras Per School Committee policy \$60,000 \$77,400 Yes \$77,400 Yes			Reduce quantity of CCTV interior cameras	Per School Committee policy	\$60,000	\$77,400	Yes				\$77,400	YES

Fort River Elementary School									
Amherst, MA									
Architect: DiNisco Design									
OPM: Anser									
January 19, 2023								1	
SCHE	NATIC DESIGN PHASE			Team Recommended		Impact			SBC Decision
Value Engineering Options	Description / Impact	Direct Cost	Total Deduct (incl 29% markups)	Yes / No / Potential	Design	Program Sustainabilty	Ops	Accepted	
Reduce quantity of CCTV exterior building cameras by 15%	Reduce quantity while providing security. Full review is required	\$8,000	\$10,320	Yes			X	\$10,320	YES
Remove CCTV parking lot cameras	To be reviewed with safety / security / operations	\$40,000	\$51,600	Yes			X	\$0	
Total Value of Identified								\$5,350,447	