

**State College Area School District
Office of Physical Plant
Ed Poprik, Director**

V-S

To: Board of School Directors
From: Ed Poprik
RE: **Change Orders, High School Project**
Date: June 12, 2017

Recommend that the Board of School Directors approve the attached submission of PlanCon Part I, along with the following Change Orders for the High School Project:

General Contractor CO #61, in the amount of \$933.24
General Contractor CO #62, in the amount of \$15,537.57
Plumbing Contractor CO #13, in the amount of \$45,218.00
Fire Protection Contractor CO #08, in the amount of \$2,851.00

Background-

GC-61: This change is related to adding an exhaust at a laser engraver in room A203. This engraver is shown on the interior layouts but no exhaust is called for in the project drawings. This portion of the change relates only to the General Contractor with corresponding changes involved for the Electrical and Mechanical Contractors.

GC-62: This change is for the South portion of RFI 306, which relates to stair stringer design. The stair stringers (structural steel) shown on the drawings would have allowed too much deflection if installed. This work will increase the size of the tube steel from 2" by 12" to 4" by 16" in 2 of the stairwells.

PC-13: This change is to add condensate drains. 18 overhead heat pumps did not have condensate drains shown on the drawings. This work will include the addition of about 800 feet of piping.

High School Project Change Orders, June 12, 2017

PlanCon Part I submission will be required for any change order over \$19,400. Consequently, the attached PlanCon I form includes the above change order.

FP-08: This change is to remove existing fire sprinkler piping in the cafeteria area. A 1997 project made additions and renovations to the South Cafeteria, which included the addition of fire sprinklers in this area. That work cannot be re-used and this change will be to remove it, which was not shown in the project plans.

An updated Change Order log is attached.

APPLICATION FOR CHANGE ORDER APPROVAL

District/CTC: State College Area School District	Project Name: State College Area High School	Project #: 3802	Change Order #: GC-60
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CHECK ALL THAT APPLY:

- CUMULATIVE TOTAL EXCEEDS \pm 3% or \$300,000 AND CHANGE ORDER GREATER THAN \pm \$10,000
- ACT 34 REFERENDUM OR SECOND ACT 34 HEARING REQUIRED
- CHANGE ORDER AFFECTS ONE OR MORE OF THE FOLLOWING:
REIMBURSABLE CAPACITY, ACT 34 CAPACITY, SCHEDULED AREA, ARCHITECTURAL AREA

DESCRIPTION OF PROPOSED WORK:

This change is to supply condensate drains and piping to heat pumps located above ceiling in the existing building.

REASONS FOR PROPOSED CHANGE:

Ground mounted heat pumps were supplied with condensate drains. However, within the existing building due to existing building many of the heat pumps were required to be above ceilings. These locations had not been detailed on the original drawings.

JUSTIFICATION FOR NOT USING SUPPLEMENTAL CONTRACT:

This work is directly related to the Plumbing Contractor's work and a supplemental contract is not possible.

EXPECTED DATE OF CONTRACT EXECUTION (M/D/YYYY): Change Order will be processed upon approval by PDE Part I Submission.

COST BREAKDOWN OF PROPOSED WORK	NEW	EXISTING
A. General		
B. Heating and Ventilating		
C. Plumbing		45,218
D. Electrical		
E. Site Construction		
F. Other: <u>Fire Protection Construction</u>		
G. Other: <u>Food Service Construction</u>		
H. Owner Controlled Insurance Program/Builder's Risk Insurance on Structure Costs (Exclude asbestos abatement, building purchase and other structure costs not covered by the program)		
I: TOTAL COST OF PROPOSED WORK		45,218

COMPLETE THIS SECTION ONLY IF REQUESTING AN EXCEPTION TO THE 3%/\$300,000 REIMBURSEMENT LIMIT FOR CHANGE ORDERS

Upward adjustments to reimbursement are limited to costs not greater than \$300,000 or three percent (3%) of allowable structure costs (base bid and accepted alternates) for work done within three (3) years of the receipt of original bids. Exceptions must be requested and approved in writing.

N/A

CHANGE ORDER LOG FOR HIGH SCHOOL: SUMMARY PAGE

	Original Contract	APPROVED				Total approved	Current Contract	PENDING	EXPOSURE
		CODING REGULATORY	DOCUMENT	OWNER	UNFORESEEN				
SUMMARY OF CHANGES									
TOTAL SP15 CHANGES	\$1,609,700	\$0	-\$5,000	-\$11,426	\$266,898	\$250,472	\$1,860,172	\$0	\$0
TOTAL GENERAL CHANGES	\$72,180,800	\$77,613	\$112,986	-\$1,054,837	\$249,636	-\$614,602	\$71,566,198	\$16,471	\$116,400
TOTAL SITE CHANGES	\$9,719,000	\$0	-\$7,200	-\$132,482	\$243,743	\$104,062	\$9,823,062	\$0	\$173,000
TOTAL KITCHEN EQUIP. CHANGES	\$2,288,000	\$0	\$0	\$0	\$0	\$0	\$2,288,000	\$0	\$0
TOTAL PLUMBING CHANGES	\$6,915,800	\$237,842	\$102,688	-\$216,700	\$2,906	\$126,736	\$7,042,536	\$45,218	\$75,000
TOTAL FIRE PROTECT. CHANGES	\$1,714,100	\$10,511	\$34,096	\$0	\$0	\$44,607	\$1,758,707	\$2,851	\$1,500
TOTAL MECHANICAL CHANGES	\$13,363,000	\$22,575	-\$26,399	\$0	\$0	-\$3,824	\$13,359,176	\$0	\$123,500
TOTAL ELECTRICAL CHANGES	\$14,321,500	\$161,168	\$137,871	-\$430,980	\$40,395	-\$91,546	\$14,229,954	\$0	\$166,600
SUBTOTALS	\$122,111,900	\$509,709	\$349,042	-\$1,846,425	\$803,579	-\$184,095	\$121,927,805	\$64,540	\$656,000

ORIGINAL CONTRACTS	\$122,111,900	
APPROVED CHANGES	-\$184,095	
CURRENT CONTRACT AMT.	\$121,927,805	Current Above Orig. Bid
		-0.15%

ORIGINAL CHANGE CONTINGENCY	\$3,320,067
INSURANCE SETTLEMENT	\$55,563
NEW CHANGE CONTINGENCY	\$3,375,630
APPROVED CHANGES	-\$184,095
CONTINGENCY REMAINING	\$3,559,725

Projected Soft costs	\$19,072,675
Grants	\$3,935,393

Total "Potential" Project cost to date \$137,249,182

General Contract

		APPROVED				PENDING	EXPOSURE
		CODING		OWNER			
GENERAL PRIME CONTRACT		REGULATORY	DOCUMENT	UNFORESEEN			
GC-01	Metal Panel Manufacturer substitution			-\$130,000.00			
GC-02	Roof adherence and coping system			-\$100,000.00			
GC-03	new roof in lieu of restoration			-\$116,000.00			
GC-04	shop fabricated roof edge			-\$44,000.00			
GC-05	stone veneer substitution - SouthA			-\$69,550.00			
GC-06	stone veneer substitution - SouthB				failed		
GC-07	stone veneer substitution - North			-\$71,051.00			
GC-08	Brick substitution - North			-\$7,500.00			
GC-09	ceramic tile substitutions			-\$198,670.00			
GC-10	additional tile substitution			-\$28,000.00			
GC-11	flooring substitution - fitness center			-\$55,000.00			
GC-12	flooring substitution - stairs			-\$19,000.00			
GC-13	Concrete reduction in amphitheater			-\$13,000.00			
GC-14	ceiling tile substitution - commons			-\$96,000.00			
GC-15	ceiling tile substitution - hall			-\$104,000.00			
GC-16	ceiling tile substitution - media center				failed		
GC-17	Response to Add. 9, code comments	\$61,439.28					
GC-18	unsuitable soils- unit cost			\$0.00			
GC-19	Elevator Door Fire Rating	\$3,163.15					
GC-20	RFI 069 South IT Room wall finish				\$1,268.02		
GC-21	unsuitable soils - part 1				\$96,725.51		
GC-22	unsuitable soils - part 2				\$17,693.83		
GC-23	North Building Phasing			\$13,831.60			
GC-24	unsuitable soils part 3				\$5,894.76		
GC-25	rfi 133 - additional floor diffusers		\$527.55				
GC-26	auditorium hat channel				\$1,632.60		
GC-27	unsuitable soils - part 4				\$8,790.08		
GC-28	COR 14 added roof beams (rfi 168)		\$1,149.00				
GC-29	RFI 110 - stair stringers - A2		\$16,149.31				
GC-30	RFI 110 - stair stringers - B2		\$10,082.00				
GC-31	RFI 110 - stair stringers - C2		\$10,082.00				
GC-32	added steel for expansion COR15		\$8,000.00				
GC-33	CR10 - code changes part 1		\$6,356.14				
GC-34	CR11 - code changes part 2		-\$1,453.18				
GC-35	unsuitable soils - aug/sept				\$19,641.25		
GC-36	North data center wall modifications		-\$2,104.36				
GC-37	rfi-156 chase wall in lab A127		\$793.96				
GC-38	soil bearing issue - at building G				\$19,363.00		
GC-39	October unsuitable soils				\$3,775.09		
GC-40	rfi 175; C011 modification (backflow)		\$5,447.55				
GC-41	rfi 72; heat pump closet door width		\$1,892.17				
GC-42	rfi 103; masonry modifications		\$2,050.50				
GC-43	rfi-216/218; floor support beams		\$3,498.97				
GC-44	CR-14		\$3,350.20				
GC-45	rfi-233; beam support at G1		\$2,063.46				
GC-46	rfi 109; draft curtain (stair)	\$13,010.68					
GC-47	credit to delete painting in heat pumps			-\$16,898.00			
GC-48	rfi 267; hoist beam modifications		\$600.00				
GC-49	Housekeeping pads at G-1		\$2,284.87				
GC-50	rfi 307; bridge slab support		\$2,136.03				
GC-51	rfi 316; culinary lab wall				\$9,701.83		
GC-52	rfi 290; new chase wall A205, cabinets		\$1,161.42				
GC-53	rfi 326; aquaponics lintel		\$6,787.17				
GC-54	rfi 338; lintels at metal panel		\$23,368.49				
GC-55	rfi 311; mat hoist coordination		\$789.88				
GC-56	rfi 331; steel plate at chiller				\$1,693.30		
GC-57	rfi 341; area f1 bar joist orientation				\$1,805.79		
GC-58	rfi 334; missing culinary arts casework		\$7,247.10				
GC-59	rfi 364; cavity wall insulation at grade		\$725.78				
GC-60	rfi 303; slab on deck wall collapse				\$61,651.29		
GC-61	rfi 332; A203 laser engraver				\$933.24		
GC-62	rfi 306; stair stringer increase - South				\$15,537.57		
	delete ornamental fence					-\$6,300.00	
	CR13-laminated glass					\$3,000.00	
	unsuitable soils - remaining phase1-2					\$15,000.00	
	rfi-174 CMU walls at F1 (6" to 8")					\$1,000.00	
	rfi-196; Café chase wall					\$1,000.00	
	north data center mesh handrail					-\$500.00	
	rfi-197; G256 chase wall					\$800.00	
	rfi 195; tunnel hatch/access					\$2,500.00	
	rfi 201; hi density storage ceiling					\$1,000.00	
	rfi 206; change in door hardware 306					\$600.00	

General Contract

	APPROVED				PENDING	EXPOSURE
	CODING					
	REGULATORY	DOCUMENT	OWNER	UNFORESEEN		
GENERAL PRIME CONTRACT						
rfi 205; area E1/A lintel						\$6,000.00
rf-255; aquaponics greenhouse water proofing						\$10,000.00
rfi 263 - room G218 beam extension						\$2,000.00
North brick repointing						\$10,000.00
rfi 266; south building fdc wall						\$1,500.00
rfi 295; bathroom fire wall						\$1,500.00
rfi 298; fitness center door hardware						\$800.00
rfi 297; plumbing housekeeping pads						\$1,500.00
rfi 306; stair stringer increase - North						\$32,000.00
rfi 324; rtu #4 bar joists						\$14,000.00
rfi 319; art room exhaust						\$2,000.00
rfi 351; wheelchair platform (aud.)						\$4,000.00
rfi 346; existing aud. Alcove ceilings						\$5,000.00
rfi 357; gym chase and padding (aux)						\$5,000.00
rfi 366: South aud. Ceiling						\$10,000.00
wood shop counter tops						\$2,700.00
rfi 389; Lgl wall lintels						\$800.00
rfi 397; room 118 bar joist elimination						-\$15,000.00
rfi; 408 main entry louvre change						\$4,500.00
SUBTOTALS	\$77,613.11	\$112,986.01	-\$1,054,837.40	\$249,636.35	\$16,470.81	\$116,400.00

APPROVED CHANGES	-614,601.93	
ORIGINAL CONTRACT	<u>\$72,180,800.00</u>	
CURRENT CONTRACT AMT.	<u>\$71,566,198.07</u>	
PENDING CHANGES	<u>\$16,470.81</u>	
"POTENTIAL" TOTAL	<u>\$71,582,668.88</u>	GENERAL PRIME

Site Contract

		APPROVED				PENDING	EXPOSURE
		CODING					
SITE PRIME CONTRACT		REGULATORY	DOCUMENT	OWNER	UNFORESEEN		
SC-01	curb substitution				-89,839.00		
SC-02	paving reduction				-44,133.00		
SC-03	lower south access road				4,800.00		
SC-04	Manhole change (MH13a)					4,491.15	
SC-05	Storm pipe reconfiguration		-7,200.00				
SC-06	rock removal					44,263.70	
SC-07	rain water harvester credit				-4,745.91		
SC-08	overexcavation at track retaining wall					3,580.06	
SC-09	trench rock July					21,795.00	
SC-10	rock at track wall					10,291.45	
SC-11	sinkhole at rear of North					2,135.84	
SC-12	sanitary conflict					25,424.11	
SC-13	Electrical extension across parking lot					17,070.65	
SC-14	low pavement existing					1,741.54	
SC-15	additional sanitary survey					5,410.27	
SC-16	August trench					487.50	
SC-17	September rock					81,302.50	
SC-18	gate credit				-1,380.00		
SC-19	sinkhole at transformer duct bank					1,101.84	
SC-20	October and November rock					23,092.50	
SC-21	December through March rock					1,076.60	
SC-22	April rock removal					478.50	
SC-23	rfi 302; kitchen transformer relocation				2,816.30		
	Westerly intersection overexcavation						19,000.00
	remaining rock removal (2017)						50,000.00
	remaining rock removal (2018)						100,000.00
	inlet box revision						4,000.00
	SUBTOTALS	\$0.00	-\$7,200.00	-\$132,481.61	\$243,743.21	\$0.00	\$173,000.00

APPROVED CHANGES	\$104,061.60	
ORIGINAL CONTRACT	\$9,719,000.00	
CURRENT CONTRACT AMT.	\$9,823,061.60	
PENDING CHANGES	\$0.00	
"POTENTIAL" TOTAL	\$9,823,061.60	SITE PRIME

Kitchen Equipment Contract

		APPROVED				PENDING	EXPOSURE
		CODING					
		REGULATORY	DOCUMENT	OWNER	UNFORESEEN		
KITCHEN EQUIPMENT PRIME CONTRACT							
KC-01							
	SUBTOTALS						\$0.00

APPROVED CHANGES	\$0.00	
ORIGINAL CONTRACT	<u>\$2,288,000.00</u>	
CURRENT CONTRACT AMT.	<u>\$2,288,000.00</u>	
PENDING CHANGES	\$0.00	
"POTENTIAL" TOTAL	\$2,288,000.00	KITCHEN EQUIP. PRIME

Plumbing Contract

		APPROVED				PENDING	EXPOSURE
		CODING					
		REGULATORY	DOCUMENT	OWNER	UNFORESEEN		
PLUMBING PRIME CONTRACT							
PC-01	VE-delete rainwater harvesting				-\$152,300.00		
PC-02	change in drain piping				-\$64,400.00		
PC-03	Addendum 9 code changes	\$218,605.00					
PC-04	Delete courtyard manhole					-\$1,181.00	
PC-05	CR11 - code changes part 2		\$65,500.00				
PC-06	CR13 - lab piping		\$8,570.00				
PC-07	data center generator tie-in		\$19,199.00				
PC-08	RFI 082 - vent line demo at North					\$852.00	
PC-09	rfi 269; room A201 sink change		\$2,600.00				
PC-10	CR10 - code changes part 1	\$19,237.00					
PC-11	rfi 270: room A201 eyewash station		\$6,819.00				
PC-12	rfi 303: slab on deck wall collapse					\$3,235.00	
PC-13	rfi 312; condensate drains						\$45,218.00
	existing sanitary conflict						\$3,000.00
	rfi 287; generator gas delivery issue						\$20,000.00
	rfi 175; C011 modification (backflow)						\$1,000.00
	CR 14; plumbing fixture changes						\$2,000.00
	rfi 253; headwall layout adjustment						\$1,500.00
	rfi 255; aquaponics drains						\$500.00
	rfi 295; bathroom fire wall						\$8,000.00
	rfi 347; F1 roof drains						\$1,000.00
	rfi 340; piping at skylights in F1						\$3,000.00
	temporary water to South upper						\$15,000.00
	Boiler change credit						
	water cooler chase firestopping						\$20,000.00
	SUBTOTALS	\$237,842.00	\$102,688.00	-\$216,700.00	\$2,906.00	\$45,218.00	\$75,000.00

APPROVED CHANGES \$126,736.00

ORIGINAL CONTRACT \$6,915,800.00

CURRENT CONTRACT AMT. \$7,042,536.00

PENDING CHANGES \$45,218.00

"POTENTIAL" TOTAL **\$7,087,754.00** PLUMBING PRIME

Fire Protection Contract

		APPROVED				PENDING	EXPOSURE
		CODING					
		REGULATORY	DOCUMENT	OWNER	UNFORESEEN		
FIRE PROTECTION PRIME CONTRACT							
FP-01	CR-10	\$1,400.00					
FP-02	RFI-119 - data center expansion		\$14,097.00				
FP-03	RFI-90 - Unit F changes		\$8,057.00				
FP-04	missing heads at loading dock		\$4,585.00				
FP-05	rfi 293; fire wall code details	\$9,111.00					
FP-06	rfi 303: slab on deck wall collapse				\$677.00		
FP-07	rfi 342; North building dry system		\$7,357.00				
FP-08	f1/f2 existing pipe demo					\$2,851.00	
	rfi-223; hose cabinet locations						\$1,500.00
	SUBTOTALS	\$10,511.00	\$34,096.00			\$2,851.00	\$1,500.00

APPROVED CHANGES \$44,607.00

ORIGINAL CONTRACT \$1,714,100.00

CURRENT CONTRACT AMT. \$1,758,707.00

PENDING CHANGES \$2,851.00

"POTENTIAL" TOTAL **\$1,761,558.00** FIRE PROTECTION PRIME

Mechanical Contract

		APPROVED				PENDING	EXPOSURE
		CODING					
		REGULATORY	DOCUMENT	OWNER	UNFORESEEN		
MECHANICAL PRIME CONTRACT							
MC-01	Addendum 9 - code changes	\$22,575.00					
MC-02	RFI 016 - new DW fan		\$1,664.00				
MC-03	RFI 030 - Lab Exhaust controls		\$33,314.00				
MC-04	rfi-37 - duct run out sizes		\$5,301.00				
MC-05	RFI 8, 12, 13 - Elec Baseboards		\$4,243.00				
MC-06	rerouting/phasing in nurse area		\$4,762.00				
MC-07	boiler credit		-\$80,938.00				
MC-08	rfi-157 South auditorium return duct		\$2,467.00				
MC-09	rfi 274; north data center vestibule heat		\$2,788.00				
	rfi-108 North make up unit piping						\$30,000.00
	rfi-134 direct fired shop units alignment						\$17,000.00
	CR 14; new EF North						\$2,000.00
	rfi 199; temp support tunnel walls						\$1,000.00
	temp heat						\$15,000.00
	rfi 332; laser engraver exhaust A203						\$3,500.00
	CR 11; air compressor tie-in						\$4,000.00
	rfi 319; art room exhaust						\$38,000.00
	rfi 335; wood shop layout changes						\$3,000.00
	rfi 344; room C222 smoke dampers						\$3,000.00
	rfi 325; aquaponics piping relocation						\$2,000.00
	rfi 360: smoke dampers						\$2,000.00
	rfi 371; transfer air grilles at open CR's						\$3,000.00
	SUBTOTALS	\$22,575.00	-\$26,399.00		\$0.00	\$0.00	\$123,500.00

APPROVED CHANGES	(\$3,824.00)	
ORIGINAL CONTRACT	\$13,363,000.00	
CURRENT CONTRACT AMT.	<u>\$13,359,176.00</u>	
PENDING CHANGES	\$0.00	
"POTENTIAL" TOTAL	\$13,359,176.00	MECHANICAL PRIME

Electrical Contract

		APPROVED				PENDING	EXPOSURE
		CODING					
		REGULATORY	DOCUMENT	OWNER	UNFORESEEN		
ELECTRICAL PRIME CONTRACT							
EC-01	aluminum conductors in lieu of copper				-\$135,000.00		
EC-02	fixture substitutions				-\$210,000.00		
EC-03	Addendum 9 - code changes	\$115,705.00					
EC-04	substitute control system				-\$124,980.00		
EC-05	Power to modular classrooms				\$39,000.00		
EC-06	Rock removal					\$40,395.00	
EC-07	CR 10 - Code review Part 1	\$1,139.00					
EC-08	CR 11 - Code review Part 2	\$8,291.00					
EC-09	rfi 42; elevator circuit breaker		\$5,234.00				
EC-10	rfi 80; circuit breaker coord. Part 1		-\$1,166.00				
EC-11	rfi 123; circuit breaker coord. Part2		\$368.00				
EC-12	rfi 124; data center ATS change		\$2,207.00				
EC-13	rfi 131-floor box changes		\$2,059.00				
EC-14	rfi 175; C-011 backflow		\$1,613.14				
EC-15	CR 13 transformer relocation	\$14,000.00					
EC-16	rfi 79; power to meter pits		\$26,707.00				
EC-17	CR14		\$88,582.00				
EC-18	rfi 302; kitchen transformer relocation		-\$92,764.00				
EC-19	rfi-217; Electric to door hardware		\$101,683.00				
EC-20	rfi 265; ASCO switch		-\$16,667.00				
EC-21	CR 15	\$22,033.00					
EC-22	rfi 52; pump circuit breakers		\$3,515.00				
EC-23	rfi 274; North data center vestibule heat		\$955.00				
EC-24	rfi 300; light fixture coordination		\$246.00				
EC-25	rfi 335; wood shop layout changes		\$2,367.00				
EC-26	rfi 298; fitness center door hardware		-\$631.00				
EC-27	rfi 304; dimmer panel breaker		\$864.00				
EC-28	rfi 311; matt hoist coordination		\$881.00				
EC-29	rfi 319; art room exhaust		\$2,335.00				
EC-30	rfi 332; A203 laser engraver		\$2,536.00				
EC-31	rfi 333; cafeteria menu boards		\$3,292.00				
EC-32	rfi 352; equipment power A201		\$2,095.00				
EC-33	rf 354; autobrine power		\$1,560.00				
	camera drops						\$50,000.00
	rfi 334; C222 smoke dampers						\$2,000.00
	rfi 359; lab power issues						\$80,000.00
	rfi 355; ADA ramp exit signs, culinary						\$800.00
	rfi 317; greenhouse light fixture changes						\$500.00
	LGI partition power						\$4,000.00
	rfi 324: power to RTU						\$4,000.00
	boiler credit						
	rfi 372: CTC rooms emergency stop						\$8,000.00
	rfi 342: North dry system						\$2,000.00
	rfi 383: room E122 split system power						\$3,000.00
	rfi 394; mezzanine lighting						\$1,000.00
	rfi 226; added fire alarm pull stations						\$6,000.00
	rfi 117; elevator breaker coordination						\$5,300.00
	SUBTOTALS	\$161,168.00	\$137,871.14	-\$430,980.00	\$40,395.00	\$0.00	\$166,600.00

APPROVED CHANGES -91,545.86

ORIGINAL CONTRACT **\$14,321,500.00**
 CURRENT CONTRACT AMT. **\$14,229,954.14**

PENDING CHANGES \$0.00

"POTENTIAL" TOTAL **\$14,229,954.14** ELECTRICAL PRIME