



SMS

SOMERSET MIDDLE SCHOOL

SMS Building Committee

Ai3 Architects, LLC
CGA Project Management

February 10, 2022



60% Construction Documents: Cost Estimate Comparison



Somerset Middle School

Approved Construction Budget

(Excluding Add Alt #1: Re-use of existing 285kW PV System)

	\$68,956,365			
	PM&C	CHA		
Cost	60% CD Cost Estimate	60% CD Cost Estimate	Difference	Percentage
Total Estimated Construction Cost	\$71,067,911	\$71,205,009	\$137,098	-0.2%
	Delta			
	+\$2,111,546			

	Add Alternates	PM&C Cost	CHA Cost	Difference
#1	Cost to reinstall existing 285kW photovoltaic (PV) system	\$500,000	\$589,500	+\$89,500
#2	Cost to include an irrigation well	\$84,750	\$96,678	+\$11,928

1. Estimates assume a construction start of August 2022.
2. Estimates assume public bidding under Chapter 149 (Design - Bid - Build) of the MGL.

60%Construction Documents Cost Estimate Comparison (PM&C: DD vs. 60%CD)

Somerset Middle School

	DD	60%CD	Difference
A10 FOUNDATIONS	\$4,350,653	\$4,543,720	+\$193 K
Standard Foundations	\$2,297,179	\$2,343,276	+\$46 K
Lowest Floor Construction	\$2,053,474	\$2,200,444	+\$147 K
B10 SUPERSTRUCTURE	\$5,678,760	\$5,396,208	-\$283 K
Upper Floor Construction	\$1,976,807	\$3,155,807	+\$1.2 million
Roof Construction	\$3,701,953	\$2,240,401	-\$1.5 million
B20 EXTERIOR CLOSURE	\$7,073,095	\$6,941,542	-\$132 K
Exterior Walls	\$4,965,946	\$4,889,630	-\$76 K
Windows	\$1,890,220	\$1,806,500	-\$84 K
Exterior Doors	\$216,929	\$245,412	+\$28K
B30 ROOFING	\$2,088,220	\$2,183,310	+\$95 K
C10 INTERIOR CONSTRUCTION	\$6,228,435	\$6,379,398	+\$151 K
Partitions	\$3,886,206	\$3,843,439	-\$43 K
Interior Doors	\$987,644	\$1,043,491	+\$56 K
Specialties/Millwork	\$1,354,585	\$1,492,468	+\$138 K
C20 STAIRCASES	\$376,042	\$430,042	+\$54 K
C30 INTERIOR FINISHES	\$3,255,944	\$4,221,203	+\$965 K
Wall Finishes	\$926,154	\$1,057,186	+\$131 K
Floor Finishes	\$1,038,484	\$1,279,664	+\$241 K
Ceiling Finishes	\$1,291,306	\$1,884,353	+\$593 K

	DD	60%CD	Difference
D10 CONVEYING SYSTEMS	\$224,000	\$224,000	\$0
D20 PLUMBING	\$2,232,325	\$2,306,539	+\$74 K
D30 HVAC	\$6,215,010	\$6,763,191	+\$548 K
D40 FIRE PROTECTION	\$743,160	\$739,470	-\$4 K
D50 ELECTRICAL	\$5,598,187	\$6,177,481	+\$579 K
Service & Distribution	\$1,673,985	\$1,676,300	+\$2 K
Lighting & Power	\$1,470,147	\$1,551,739	+\$82 K
Communication & Security Systems	\$2,360,055	\$2,659,442	+\$299 K
Other Electrical Systems	\$94,000	\$290,000	+\$196 K
E10 EQUIPMENT	\$1,459,505	\$1,897,663	+\$438 K
E20 FURNISHINGS	\$1,350,324	\$1,481,930	+\$132 K
ESCALATION (start date August 2022)	\$1,332,073	\$783,021	-\$549 K
DESIGN & PRICING CONTINGENCY	\$2,368,130	\$939,626	-\$1.4 million
BUILDING DEMOLITION	\$749,400	\$749,400	\$0
F20 HAZMAT REMOVALS	\$818,000	\$818,000	\$0
G SITE	\$10,762,185	\$11,388,618	+\$626 K
GENERAL CONDITIONS & GENERAL REQUIREMENTS (bonds, insurance, OHP)	\$6,551,394	\$6,703,549	+\$152 K
TOTAL CONSTRUCTION COST	*\$68,954,842	\$71,067,911	
APPROVED CONSTRUCTION BUDGET		*\$68,956,365	+\$2.1 million

*Excludes costs for existing 285kW PV relocation to the new building

60% Construction Documents Cost Estimate Comparison (PM&C: DD vs. 60%CD)

Somerset Middle School

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Ceiling Finishes	\$1,291,306	\$1,884,353	+\$593 K

GENERAL

- Remove exterior storage building, broom finished concrete path, and associated utilities
- Reduce bus loop canopy at Academic Wing by 50%
- Replaced polished concrete floor in Technology / Engineering classrooms and associated spaces with painted concrete. Replace overhead doors (2) with standard double doors
- Gymnasium: Reduce exterior curtain wall by 30% and include wall pads between egress doors
- Reduce Academic Wing entry vestibule by 80sf
- Reduce skylights in the Library Media Center corridor by 50%

B20 EXTERIOR CLOSURE

- Reduction of window, storefront, and curtain wall area throughout building perimeter
- Replace aluminum entry door to Mechanical room with hollow metal door
- Reduce stone watertable throughout building perimeter

C10 INTERIOR CONSTRUCTION

- Technology/Engineering: Remove sliding glass door display and interior window, and reduce acoustic felt panels
- Project Labs: Remove open grid ceiling
- Library Media Center: Replace overhead glazed door with interior hollow metal, and remove computer desk that wraps office space
- Reduction of window, storefront, curtain wall, and transom throughout interior spaces
- Student Gear Storage: Move wire mesh partitions and doors to FF&E

Value Engineered

GENERAL

-\$330,825

B20 EXTERIOR CLOSURE

-\$173,400

C10 INTERIOR CONSTRUCTION

-\$288,200

60% Construction Documents Cost Estimate Comparison (PM&C: DD vs. 60%CD)

Somerset Middle School

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C30 INTERIOR FINISHES

- Art Classrooms: Replace polished concrete floor with painted concrete
- Assembly Stair: Remove perforated metal panel
- Auditorium: Remove perforated metal panel at proscenium opening
- Science Classrooms: Remove epoxy waterfall edge from end of casework and replace with rigid vinyl cladding
- Technology Engineering: Remove decorative wood panels and wood soffit
- Teacher Collaboration Spaces: Remove plastic laminate panels
- Remove rated ceiling from electrical/emergency electrical rooms

Value Engineered

C30 INTERIOR FINISHES

-\$184,220

60% Construction Documents Cost Estimate Comparison (PM&C: DD vs. 60%CD)

	DD	60%CD	Difference		Value Engineered
D10 CONVEYING SYSTEMS	\$224,000	\$224,000	\$0		
D20 PLUMBING	\$2,232,325	\$2,306,539	+\$74 K	D20 PLUMBING <ul style="list-style-type: none"> Remove oil/gas separator and floor drain at overhead door 	D20 PLUMBING -\$3,500
D30 HVAC	\$6,215,010	\$6,763,191	+\$548 K		
D40 FIRE PROTECTION	\$743,160	\$739,470	-\$4 K		
D50 ELECTRICAL	\$5,598,187	\$6,177,481	+\$579 K	D50 ELECTRICAL/TECHNOLOGY <ul style="list-style-type: none"> Remove field security cameras Reduce interactive displays to 65" in Teacher Collaboration spaces and Reading Rooms Remove lightning protection Move hovercams to Technology budget 	D50 ELECTRICAL/TECHNOLOGY -\$224,800
Service & Distribution	\$1,673,985	\$1,676,300	+\$2 K		
Lighting & Power	\$1,470,147	\$1,551,739	+\$82 K		
Communication & Security Systems	\$2,360,055	\$2,659,442	+\$299 K		
Other Electrical Systems	\$94,000	\$290,000	+\$196 K		
E10 EQUIPMENT	\$1,459,505	\$1,897,663	+\$438 K	E10 EQUIPMENT <ul style="list-style-type: none"> Auditorium/Stage: Reduce lighting & dimming, audio & visual, and curtains & rigging Band/Chorus: Reduce sound system 	E10 EQUIPMENT -\$59,900
E20 FURNISHINGS	\$1,350,324	\$1,481,930	+\$132 K		
BUILDING DEMOLITION	\$749,400	\$749,400	\$0		
F20 HAZMAT REMOVALS	\$818,000	\$818,000	\$0		
G SITE	\$10,762,185	\$11,388,618	+\$626 K	G20 SITE IMPROVEMENTS <ul style="list-style-type: none"> Replace vertical granite curbing with concrete and bituminous curbing (at pedestrian paving) Remove stone veneer wall at corner near outdoor theater Replace Trapecia bench with Street Life "Drifter Bench" Replace colored concrete with exposed aggregate Remove pylon sign Remove two rail fencing at site entries Replace all freestanding stone veneer walls with 6' Gabion seat benches Reduce outdoor learning spaces/amphitheaters by 50% Reduce deciduous trees by 75% Move bike racks to FF&E Move ornamental litter recycling to FF&E 	G20 SITE IMPROVEMENTS -\$855,645

60% Construction Documents Cost Estimate Comparison (PM&C: DD vs. 60%CD)

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A10 FOUNDATIONS	\$4,350,653	\$4,543,720	+\$193 K		D10 CONVEYING SYSTEMS	\$224,000	\$224,000	\$0	
Standard Foundations	\$2,297,179	\$2,343,276	+\$46 K		D20 PLUMBING	\$2,232,325	\$2,306,539	+\$74 K	-\$3,500
Lowest Floor Construction	\$2,053,474	\$2,200,444	+\$147 K		D30 HVAC	\$6,215,010	\$6,763,191	+\$548 K	
B10 SUPERSTRUCTURE	\$5,678,760	\$5,396,208	-\$283 K		D40 FIRE PROTECTION	\$743,160	\$739,470	-\$4 K	
Upper Floor Construction	\$1,976,807	\$3,155,807	+\$1.2 million		D50 ELECTRICAL/TECHNOLOGY	\$5,598,187	\$6,177,481	+\$579 K	-\$224,800
Roof Construction	\$3,701,953	\$2,240,401	-\$1.5 million		Service & Distribution	\$1,673,985	\$1,676,300	+\$2 K	
B20 EXTERIOR CLOSURE	\$7,073,095	\$6,941,542	-\$132 K	-\$173,400	Lighting & Power	\$1,470,147	\$1,551,739	+\$82 K	
Exterior Walls	\$4,965,946	\$4,889,630	-\$76 K		Communication & Security Systems	\$2,360,055	\$2,659,442	+\$299 K	
Windows	\$1,890,220	\$1,806,500	-\$84 K		Other Electrical Systems	\$94,000	\$290,000	+\$196 K	
Exterior Doors	\$216,929	\$245,412	+\$28K		E10 EQUIPMENT	\$1,459,505	\$1,897,663	+\$438 K	-\$59,900
B30 ROOFING	\$2,088,220	\$2,183,310	+\$95 K		E20 FURNISHINGS	\$1,350,324	\$1,481,930	+\$132 K	
C10 INTERIOR CONSTRUCTION	\$6,228,435	\$6,379,398	+\$151 K	-\$288,200	ESCALATION (start date August 2022)	\$1,332,073	\$783,021	-\$549 K	-\$26,506
Partitions	\$3,886,206	\$3,843,439	-\$43 K		DESIGN & PRICING CONTINGENCY	\$2,368,130	\$939,626	-\$1.4 million	-\$31,807
Interior Doors	\$987,644	\$1,043,491	+\$56 K		BUILDING DEMOLITION	\$749,400	\$749,400	\$0	
Specialties/Millwork	\$1,354,585	\$1,492,468	+\$138 K		F20 HAZMAT REMOVALS	\$818,000	\$818,000	\$0	
C20 STAIRCASES	\$376,042	\$430,042	+\$54 K		G SITE	\$10,762,185	\$11,388,618	+\$626 K	-\$855,645
C30 INTERIOR FINISHES	\$3,255,944	\$4,221,203	+\$965 K	-\$184,220	GENERAL CONDITIONS & GENERAL REQUIREMENTS (bonds, insurance, OHP)	\$6,551,394	\$6,703,549	+\$152 K	-\$217,350
Wall Finishes	\$926,154	\$1,057,186	+\$131 K		TOTAL CONSTRUCTION COST	*\$68,954,842	\$71,067,911		-\$2,396,154
Floor Finishes	\$1,038,484	\$1,279,664	+\$241 K		APPROVED CONSTRUCTION BUDGET		*\$68,956,365	+\$2.1 million	
Ceiling Finishes	\$1,291,306	\$1,884,353	+\$593 K		*Excludes costs for existing 285kW PV relocation to the new building				
					TOTAL ESTIMATED CONSTRUCTION COST AFTER VE		\$68,671,757	-\$284,608	

60% Construction Document Submission

What is the School Building Committee Being Asked to Approve?

1. Vote to approve 60% Construction Documents and to authorize the Owner's Project Manager to submit the 60% Construction Documentation and submittal to the MSBA.
2. Vote to approve the Value Engineering list.

SOMERSET MIDDLE SCHOOL

