



Concord Middle School Project

Project Manager Report

November 2021





CONCORD MIDDLE SCHOOL PROJECT

PROJECT MANAGER'S REPORT NOVEMBER 2021

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Executive Summary

Town of Concord

Concord Middle School Project



Executive Summary

This Project Manager's Report for the Concord Middle School Project is submitted by **Hill International** (Hill) and covers activities through the month of **November 2021**.

Project Progress

The COVID-19 pandemic is ongoing. All project related meetings are continuing to be held via Zoom Video Conferencing.

The Design Team continued progression of the Schematic Design. Hill and SMMA attended School Building Committee (SBC) meetings on November 5th, November 12th, and November 18th; a Sustainability Subcommittee (SSC) meeting on November 10th. Hill and SMMA also met weekly to coordinate work tasks and deliverables to the SBC and subcommittees.

Milestones

The following milestones were achieved during the month of November 2021:

- At the November 5th SBC meeting Hill International reported on the construction cost estimates completed by AM Fogarty and PM&C. There was a \$1.4 million difference between the two estimates and Hill reported a reconciled estimate of \$82,512,622. The cost estimating firms recommended carrying the design and estimating contingency at 10% and lowering escalation from 4% to 3.5% as previously reported, both changes were accepted by the SBC. The project team broke out General Conditions costs for the Phase 2 demolition and site work and agreed to adjust to 7 months rather than 5 months as previously shown on the project schedule. Hill International reported that there were \$3.8 million in potential savings in the value management (VM) log along with items that could increase the cost of the construction estimate. The project team reviewed the 31 items on the VM log but no decisions were made. The project team reiterated that the new building would be net-0 but solar panel installation (including conduits and foundation elements) is not part of the project scope. Members of the SSC reported to the SBC on the progress of the photovoltaic scope. Hill International reported that coordination between the school project and the photovoltaic scope project is feasible during construction.
- At the November 10th Sustainability Subcommittee meeting 11 items from the VM Log pertaining to sustainability were reviewed to present recommendations to the SBC. The SSC voted to recommend approval of 4 items including reducing the mechanical screen, changing the receiving area from concrete masonry units (CMU) to fiber reinforced panel (FRP), changing the gym from CMU to impact resistant sheetrock and replacing sunshades on the south facing curtainwall with deep mullion cap. The SSC voted to recommend the rejection of 5 line items including the reduction or removal of sunshades on south facing classrooms and curtainwall, changing the curtainwall at the art room to punched windows, and changing the curtainwall from triple pane to double pane. The SSC could not come to a consensus on 2 line items and ultimately prepared to make their recommendations to the SBC totaling \$625,000 in value management.
- At the November 12th SBC meeting, a member of the Select Board reported that the Select Board had voted on a not-to-exceed budget of \$104 million for the Concord Middle School Project. A letter from a member of the finance committee directed to the SBC reported that the project cost could result in a 6-7% per household tax increase. Members of the Sustainability Subcommittee (SSC) reported their recommendations for VM log items. Hill International presented the VM recommendations from SMMA totaling \$2,310,840 in potential savings. The SBC continued to evaluate items in the VM log taking

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into consideration the recommendations of the SSC and SMMA. The SBC accepted \$912,147 in savings reducing the construction scope to \$81,600,017. Hill International presented the idea of a bidding contingency; contingency reserved specifically for the bid period in the event of a bid overage. Unused bidding contingency would be returned after the construction bid is accepted. The SBC expressed interest in this proposal. The SBC voted on a value not-to-exceed \$103,700,000 for the January 2022 warrant article (excluding the \$1.5M initial appropriation for Feasibility and Schematic Design).

- At the November 18th SBC meeting Hill continued to present the VM Log for the committee to review. The committee voted to change the generator from natural gas to diesel. The committee evaluated items 1B and 2B; diverting topsoil and suitable fill from disposal sites. The risk remained in trying to find a home for 100% of the exported topsoil and suitable fill somewhere off site. Hill and SMMA recommended that the committee accept 50% of items 1B and 2B at a value of \$617,212 to mitigate risk which to committee accepted. The committee accepted 13 line items on the VM Log to date totaling \$1,740,145, bringing the estimated construction cost to \$80,772,019.

Milestones projected for the coming months are:

- Evaluate value management recommendations
- Prepare for the Special Town Meeting on January 20, 2022

Issues

- Estimated project cost sits above Request for Services total project cost range.
- Hill and SMMA presented a request for an amendment to SMMA contract to perform additional geotechnical explorations.

Schedule

Major milestones are as follows:

- | | |
|---|--|
| ■ OPM Selection | Completed Aug. 28 th , 2019 |
| ■ Designer Selection | Completed Nov. 18 th , 2019 |
| ■ Feasibility Study (*amended report remains pending) | Completed April 29 th , 2021 |
| ■ Schematic Design | Tentative Completion date of No. 30 th , 2021 |
| ■ Special Town Meeting | January 20 th , 2022 |
| ■ Town Vote | February 3 rd , 2022 |
| ■ Design Development | See attached schedule |
| ■ 60% Contract Documents | See attached schedule |
| ■ 90% Contract Documents | See attached schedule |
| ■ 100% Contract Documents | See attached schedule |
| ■ Bidding | See attached schedule |
| ■ Construction | See attached schedule |
| ■ Substantial Completion (New Building) | See attached schedule |
| ■ Demolition of Existing Building and Add New Fields | See attached schedule |
| ■ Closeout | See attached schedule |

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Concord Middle School Project



Budget

On April 8, 2019 Concord Town Meeting passed, by overwhelming majority, an appropriation not to exceed \$1,500,000 to study the feasibility of constructing a new Middle School, which may be located on the Sanborn School Site.

Hill International contract for Feasibility/Schematic Design is \$299,800 and SMMA contract for Feasibility/Schematic Design is \$889,400.

Hill requested an additional \$5,500 to contract the cost estimator, PM&C, to provide cost estimate for Feasibility Study to compare and reconcile with SMMA's cost estimate. Hill got approval from the Leadership Team at the end of March 2020 and has completed the work. Amendment #1 was approved on September 1, 2020 for adding Feasibility cost estimate by PM&C for comparison and reconciliation with SMMA's cost estimate.

Based on the Feasibility Study completed by Finegold Alexander, the estimated Total Project Cost may range from \$80M to \$100M depending upon the solution that is agreed upon by the Owner. This Total Project Cost translates to a potential Total Construction Cost of \$60M to \$80M.

On December 5, 2019 Hill met with the Finance Subcommittee and presented the cost analysis for the Concord Middle School using the similar Middle School Project costs from the MSBA. The projected total project cost for the new Concord Middle School with 5% escalation is between \$80M - \$109M and the projected cost with 7% escalation is between \$83M - \$122M. The project budget is not yet finalized until the Design Team meets with the users and community to determine the programming, building size and enrollments.

In March 2021, Hill provided a preliminary cost analysis of the current program which forecasts the total project cost at \$99.9M.

In April 2021, the SBC brought forth additional scope requests with community support including a larger gym, larger auditorium, and additional parking. Hill and SMMA presented scope options ranging in cost from \$3.2M to \$9.75M above the current \$100M total project budget. The committee voted at the April 15 SBC meeting to increase the total project budget to not-to-exceed \$108M to further study these additional scope options.

In June 2021, the Project Team continued to monitor cost projections given the fluctuation of the building gross square footage from design iterations. Steps were taken to minimize the cost impact due to the increased gym and auditorium size. Total project cost projections currently range from \$100.8M to \$102.4M.

In July 2021, the total project cost fluctuated from \$101.5M to \$100.3M with continued changes to the building gross square footage. Market conditions and schedule can continue to impact cost and will be monitored and reported accordingly.

In September 2021, the estimated total project cost was adjusted from \$100.3M to 101.2M with the assumed construction start date being pushed back from March 2023 to May 2023. This change in schedule resulted in an estimated 1% escalation increase to 8% to 9% resulting in the total budget increase.

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Concord Middle School Project



In November 2021, the School Building Committee voted on a value not-to-exceed \$103,700,000 for the January 2022 warrant article. As a result, total project budget was increased to \$105.2M including the \$1.5M initial appropriation for Feasibility and Schematic Design.

Cash Flow

Total project budget is \$105,200,000.

Total encumbered to date is \$1,194,700.

Total spent on construction to date is \$0.00.

Total spent to date is \$1,103,359. 92% of total encumbered.

Project Team Summary

Awarding Authority	Town of Concord (ToC)
Client	Town of Concord / Concord Public Schools
Owner's Project Manager	Hill International, Inc. (Hill)
Commissioning Agent	TBD
Designer	SMMA
CM / GC	TBD



Project Dashboard



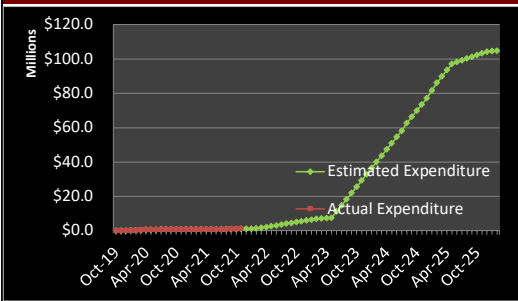
Town of Concord
Concord Middle School

Project Dashboard

November 29, 2021

EXECUTIVE SUMMARY



Project Accomplishments this Month					Current Issues & Areas of Focus			Current Progress Photos			
<p>Hill International received the cost estimates completed by PM&C and AM Fogarty.</p> <p>A reconciled construction cost estimate of \$82,512,622 was presented to the SBC by Hill and SMMA. A value management log containing 31 items ammounting to a potential \$3.8M in savings was reviewed by the SBC.</p> <p>The SBC voted to accept \$1,740,145 in value management. The SBC voted on a not-to-exceed value of \$103.7 for the warrant article, bringing the total project budget to \$105.2M including the initial \$1.5M appropriation for Feasibility and Schematic Design.</p>					Value Management						
Projected Major Tasks next Month											
<p>Complete Project Budget</p> <p>Finalize VM Log</p> <p>Prepare for Special Town Meeting</p> <p>Agree on dates to authorize Design Development Phases</p>											
Schedule Summary - Upcoming Milestones					Diversity Compliance			Project Cash Flow - Plan vs Actual			
	Scheduled Start	Scheduled Finish	Actual Start	Actual Finish	Metric	Target	Actual				
Designer Procurement	9/25/2019	11/18/2019	9/25/2019	12/9/2019	Designer's WBE/MBE	17.9%	TBD				
Feasibility/Schematic Design	11/19/19	7/1/2020	11/19/19	11/5/2021	Contractor's WBE/MBE	10.4%	TBD				
Town Meeting (Proposed)	1/20/22	1/20/22									
Town Vote (Proposed)	2/3/22	2/3/22									
Design Development / Contract Documents	2/7/22	2/22/23									
Bidding	10/24/22	4/23/23									
Construction	5/9/23	12/10/24									
Punch List & Move-in	12/11/24	4/11/25									
Demolition Existing Building	4/15/25	9/12/25									
Closeout	9/12/25	1/15/26									
PROJECT FINANCIAL OVERVIEW										Scope changes from the Original Scope	
Description	BUDGET				COST				CASH FLOW		N/A
	Baseline	Budget	Authorized Changes	Approved Budget	Committed Costs	Uncommitted Costs	Forecast Costs	Total Project Costs	Expenditures to Date	Balance To Spend	
Site Acquisition	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Construction	\$ 80,000,000	\$ 772,019	\$ 80,772,019	\$ -	\$ 80,772,019	\$ -	\$ 80,772,019	\$ -	\$ 80,772,019	\$ -	
Design Services	\$ 8,281,000	\$ 610,000	\$ 8,891,000	\$ 889,400	\$ 8,001,600	\$ -	\$ 8,891,000	\$ 816,079	\$ 8,074,921		
Administrative	\$ 4,279,595	\$ 529,285	\$ 4,808,880	\$ 305,300	\$ 4,503,580	\$ -	\$ 4,808,880	\$ 287,280	\$ 4,521,600		
FF&E	\$ 2,677,500	\$ (52,500)	\$ 2,625,000	\$ -	\$ 2,625,000	\$ -	\$ 2,625,000	\$ -	\$ 2,625,000		
SUBTOTAL	\$ 95,238,095	\$ 1,858,804	\$ 97,096,899	\$ 1,194,700	\$ 95,902,199	\$ -	\$ 97,096,899	\$ 1,103,359	\$ 95,993,540		
Construction Contingency (Hard Cost)	\$ 4,000,000	\$ 907,999	\$ 4,907,999	\$ -	\$ 4,907,999	\$ -	\$ 4,907,999	\$ -	\$ 4,907,999		
Owner's FFE Contingency	\$ -	\$ 2,040,000	\$ 2,040,000	\$ -	NA	NA	NA	\$ -	NA		
Owner's Contingency (Soft Cost)	\$ 761,905	\$ 393,197	\$ 1,155,101	\$ -	\$ 1,155,101	\$ -	\$ 1,155,101	\$ -	\$ 1,155,101		
SUBTOTAL	\$ 4,761,905	\$ 3,341,196	\$ 8,103,101	\$ -	\$ 6,063,100	\$ -	\$ 6,063,100	\$ -	\$ 6,063,100		
PROJECT TOTAL	\$ 100,000,000	\$ 5,200,000	\$ 105,200,000	\$ 1,194,700	\$ 101,965,299	\$ -	\$ 103,159,999	\$ 1,103,359	\$ 102,056,640	N/A	



Project Cash Flow

December 1, 2021

Concord Middle School

Estimated Cash Flow for \$103.7M Warrant Article / Feb 3rd Town Vote



	Month		OPM + Commissioning	Designer & Consultants	FF&E & Misc. Admin.	Construction	Contingency	Estimated Expenditures	Actual Expenditures	Estimated Cumulative Expenditures	Actual Cumulative Expenditures
Design Development & Construction Documents	29	Feb-22	\$46,990					\$46,990	\$0	\$46,990	\$0
	30	Mar-22	\$46,990	\$409,300				\$456,290	\$0	\$503,280	\$0
	31	Apr-22	\$46,990	\$409,300				\$456,290	\$0	\$959,570	\$0
	32	May-22	\$46,990	\$409,300				\$456,290	\$0	\$1,415,860	\$0
	33	Jun-22	\$40,990	\$409,300				\$450,290	\$0	\$1,866,150	\$0
	34	Jul-22	\$101,840	\$397,463	\$16,667			\$515,969	\$0	\$2,382,119	\$0
	35	Aug-22	\$50,090	\$397,463	\$16,667			\$464,219	\$0	\$2,846,338	\$0
	36	Sep-22	\$49,180	\$397,463	\$16,667			\$463,309	\$0	\$3,309,648	\$0
	37	Oct-22	\$49,180	\$397,463	\$29,795			\$476,438	\$0	\$3,786,085	\$0
	38	Nov-22	\$49,180	\$397,463	\$7,143			\$453,785	\$0	\$4,239,870	\$0
	39	Dec-22	\$93,180	\$397,463	\$7,143			\$497,785	\$0	\$4,737,656	\$0
	40	Jan-23	\$56,830	\$397,463	\$7,143			\$461,435	\$0	\$5,199,091	\$0
Bid	41	Feb-23	\$56,830	\$397,463	\$7,143			\$461,435	\$0	\$5,660,526	\$0
	42	Mar-23	\$68,030	\$127,350	\$7,143			\$202,523	\$0	\$5,863,049	\$0
Construction Phase 1 (New School)	43	Apr-23	\$106,980	\$127,350	\$7,143			\$241,473	\$0	\$6,104,522	\$0
	44	May-23	\$80,630	\$96,200	\$7,143			\$183,973	\$0	\$6,288,495	\$0
	45	Jun-23	\$99,130	\$96,200	\$8,333	\$3,129,167	\$35,919	\$3,368,749	\$0	\$9,657,244	\$0
	46	Jul-23	\$100,630	\$96,200	\$8,333	\$3,129,167	\$291,667	\$3,625,997	\$0	\$13,283,242	\$0
	47	Aug-23	\$94,880	\$96,200	\$8,333	\$3,129,167	\$291,667	\$3,620,247	\$0	\$16,903,489	\$0
	48	Sep-23	\$94,880	\$96,200	\$8,333	\$3,129,167	\$291,667	\$3,620,247	\$0	\$20,523,737	\$0
	49	Oct-23	\$94,880	\$96,200	\$8,333	\$3,129,167	\$291,667	\$3,620,247	\$0	\$24,143,984	\$0
	50	Nov-23	\$94,880	\$96,200	\$8,333	\$3,129,167	\$291,667	\$3,620,247	\$0	\$27,764,232	\$0
	51	Dec-23	\$94,880	\$96,200	\$8,333	\$3,129,167	\$291,667	\$3,620,247	\$0	\$31,384,479	\$0
	52	Jan-24	\$94,880	\$96,200	\$8,333	\$3,129,167	\$291,667	\$3,620,247	\$0	\$35,004,726	\$0
	53	Feb-24	\$94,880	\$96,200	\$8,333	\$3,129,167	\$291,667	\$3,620,247	\$0	\$38,624,974	\$0
	54	Mar-24	\$94,880	\$96,200	\$8,333	\$3,129,167	\$291,667	\$3,620,247	\$0	\$42,245,221	\$0
	55	Apr-24	\$94,880	\$96,200	\$8,333	\$3,129,167	\$291,667	\$3,620,247	\$0	\$45,865,469	\$0
	56	May-24	\$94,880	\$96,200	\$8,333	\$3,129,167	\$291,667	\$3,620,247	\$0	\$49,485,716	\$0
	57	Jun-24	\$94,880	\$96,200	\$8,333	\$3,129,167	\$291,667	\$3,620,247	\$0	\$53,105,963	\$0
	58	Jul-24	\$94,880	\$96,200	\$8,333	\$3,129,167	\$291,667	\$3,620,247	\$0	\$56,726,211	\$0
	59	Aug-24	\$81,380	\$96,200	\$887,500	\$3,129,167	\$291,667	\$4,485,914	\$0	\$61,212,125	\$0
	60	Sep-24	\$81,380	\$96,200	\$12,500	\$3,129,167	\$291,667	\$3,610,914	\$0	\$64,823,039	\$0
	61	Oct-24	\$81,380	\$96,200	\$12,500	\$3,129,167	\$291,667	\$3,610,914	\$0	\$68,433,953	\$0
	62	Nov-24	\$81,380	\$96,200	\$12,500	\$3,129,167	\$291,667	\$3,610,914	\$0	\$72,044,867	\$0
	63	Dec-24	\$81,380	\$96,200	\$12,500	\$3,129,167	\$291,667	\$3,610,914	\$0	\$75,655,781	\$0
	64	Jan-25	\$81,380	\$96,200	\$887,500	\$3,129,167	\$291,667	\$4,485,914	\$0	\$80,141,695	\$0
	65	Feb-25	\$81,380	\$96,200	\$887,500	\$3,129,167	\$291,667	\$4,485,914	\$0	\$84,627,609	\$0
	66	Mar-25	\$81,380	\$96,200	\$87,500	\$3,129,167	\$291,667	\$3,685,914	\$0	\$88,313,524	\$0
	67	Apr-25	\$81,380	\$96,200	\$87,500	\$3,129,167	\$291,667	\$3,685,914	\$0	\$91,999,438	\$0
Phase 2 (Demo & Fields)	68	May-25	\$81,380	\$57,143	\$12,500	\$3,129,167	\$291,667	\$3,571,857	\$0	\$95,571,295	\$0
	69	Jun-25	\$81,380	\$57,143	\$58,538	\$857,143	\$34,388	\$1,088,592	\$0	\$96,659,886	\$0
	70	Jul-25	\$77,780	\$57,143		\$857,143	\$34,388	\$1,026,454	\$0	\$97,686,340	\$0
	71	Aug-25	\$77,780	\$57,143		\$857,143	\$34,388	\$1,026,454	\$0	\$98,712,793	\$0
	72	Sep-25	\$77,780	\$57,143		\$857,143	\$34,388	\$1,026,454	\$0	\$99,739,247	\$0
	73	Oct-25	\$68,800	\$57,143		\$857,143	\$34,388	\$1,017,474	\$0	\$100,756,720	\$0
	74	Nov-25	\$60,255	\$57,143		\$857,143	\$34,388	\$1,008,929	\$0	\$101,765,649	\$0
	75	Dec-25	\$56,055	\$41,667		\$857,143	\$34,388	\$989,252	\$0	\$102,754,901	\$0
Closeout	76	Jan-26	\$47,705	\$41,667		\$166,667	\$34,388	\$290,426	\$0	\$103,045,328	\$0
	77	Feb-26	\$41,855	\$41,667		\$166,667		\$250,188	\$0	\$103,295,516	\$0
	78	Mar-26	\$38,355	\$41,667		\$166,667		\$246,688	\$0	\$103,542,204	\$0
	79	Apr-26	\$28,407	\$41,667				\$70,074	\$0	\$103,612,278	\$0
	80	May-26	\$25,060	\$41,667				\$66,727	\$0	\$103,679,005	\$0
	81	Jun-26	\$20,995					\$20,995	\$0	\$103,700,000	\$0
	82	Jul-26						\$0	\$0	\$103,700,000	\$0
	83	Aug-26						\$0	\$0	\$103,700,000	\$0
	84	Sep-26						\$0	\$0	\$103,700,000	\$0
		Subtotal for FY '21	\$228,950	\$1,637,200	\$0	\$0	\$0	\$1,866,150			
		Subtotal for FY '22	\$861,080	\$3,626,800	\$138,128	\$3,129,167	\$35,919	\$7,791,094			
		Subtotal for FY '23	\$1,144,310	\$1,154,401	\$100,000	\$37,550,009	\$3,500,000	\$43,448,719			
		Subtotal for FY '24	\$990,060	\$1,076,286	\$2,966,871	\$35,277,984	\$3,242,721	\$43,553,923			
		Subtotal for FY '25	\$620,827	\$535,714	\$0	\$5,642,857	\$240,715	\$7,040,114			
		TOTAL						\$103,700,000			

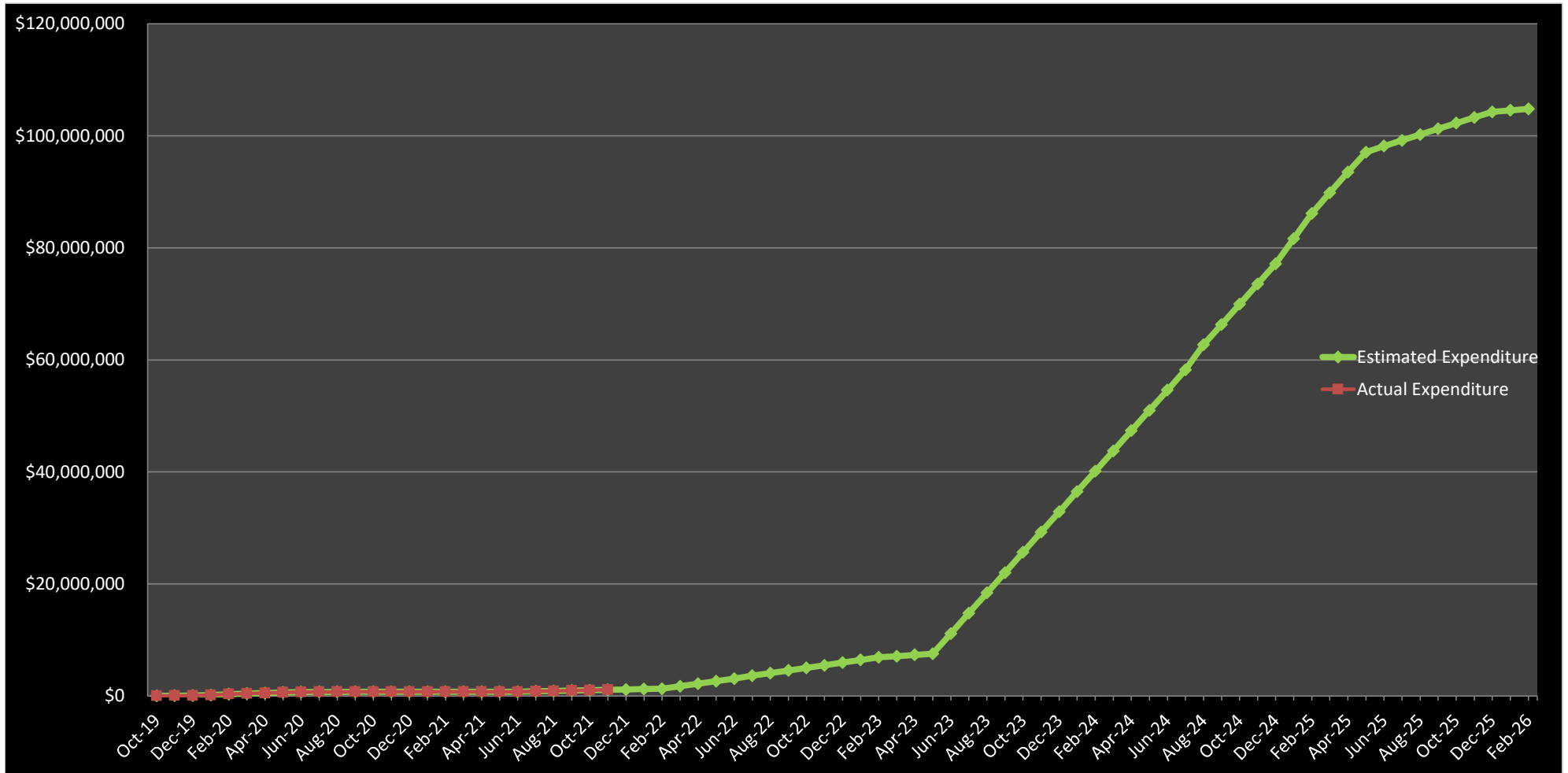
Note: Excludes \$1.5M initial funding for Feasibility and Schematic Design Phase



Town of Concord
Concord Middle School
Estimated Project Cash Flow Graph



November 29, 2021





Schedule Update



Cost Analysis

Concord Middle School
SCHEMATIC DESIGN COST ESTIMATE - RECONCILED

11/03/2021



		143,510. sf	
		RECONCILED VALUE (Average)	
	Program Area		Cost/SF
NEW BUILDING		143,510 SF	
A	Substructure		
A10	Foundations		
	A1010 Standard Foundations	\$3,236,420	\$22.55 /sf
	A1020 Special Foundations	\$0	\$0.00 /sf
	A1030 Lowest Floor Construction	\$1,393,015	\$9.71 /sf
A20	Basement Construction		
	A2010 Basement Excavation	\$0	\$0.00 /sf
	A2020 Basement Walls	\$0	\$0.00 /sf
B	Shell		
B10	Superstructure		
	B1010 Floor Construction	\$2,941,468	\$20.50 /sf
	B1020 Roof Construction	\$2,902,930	\$20.23 /sf
B20	Exterior Enclosure		
	B2010 Exterior Walls	\$5,225,479	\$36.41 /sf
	B2020 Windows	\$2,819,742	\$19.65 /sf
	B2030 Exterior Doors	\$122,385	\$0.85 /sf
B30	Roofing		
	B3010 Roof Coverings	\$2,085,706	\$14.53 /sf
	B3020 Roof Openings	\$16,500	\$0.11 /sf
C	Interiors		
C10	Interior Construction		
	C1010 Partitions	\$3,756,937	\$26.18 /sf
	C1020 Interior Doors	\$870,402	\$6.07 /sf
	C1030 Specialties/Millwork	\$1,271,846	\$8.86 /sf
C20	Stairs		
	C2010 Stair Construction	\$320,050	\$2.23 /sf
	C2020 Stair Finishes	\$40,447	\$0.28 /sf
C30	Interior Finishes		
	C3010 Wall Finishes	\$1,192,232	\$8.31 /sf
	C3020 Floor Finishes	\$1,146,944	\$7.99 /sf
	C3030 Ceiling Finishes	\$1,533,067	\$10.68 /sf
D	Services		
D10	Conveying		
	D1010 Elevators	\$206,588	\$1.44 /sf
D20	Plumbing		
	D20 Plumbing	\$2,405,794	\$16.76 /sf
D30	HVAC		
	D30 HVAC	\$7,763,699	\$54.10 /sf
D40	Fire Protection		
	D40 Fire Protection	\$964,606	\$6.72 /sf
D50	Electrical		
	D50 Electrical	\$6,668,525	\$46.47 /sf
E	Equipment & Furnishings		
E10	Equipment		
	E10 General	\$1,548,865	\$10.79 /sf
E20	Furnishings		
	E2010 Fixed Furnishings	\$1,058,472	\$7.38 /sf
F	Special Construction & Hazmat Removals		
F10	Special Construction		
	F1010 Special Construction	\$0	\$0.00 /sf
F20	Building Demolition		
	F2010 Building Elements Demolition	\$721,948	\$5.03 /sf
	F2020 Hazardous Components Abatement	\$918,585	\$6.40 /sf
	Sub-total for above trade work	\$53,132,648	\$370.24 /sf
G	Sitework		
G 10	Site Preparation	\$2,984,860	\$20.80 /sf
G 20	Site improvements	\$5,354,558	\$37.31 /sf
G 30	Utilities	\$1,628,530	\$11.35 /sf
G 40	Site Electric	\$670,023	\$4.67 /sf
	Sub-total incl. Sitework & Demo	\$63,770,619	\$444.36 /sf
	Markups		
	Escalation	0.00%	\$3,682,753 \$25.66 /sf
	Design and Estimating Contingency	0.00%	\$6,377,062 \$44.44 /sf

	Sub-total incl. Escalation & Design Cont		\$73,830,433 \$514.46 /sf
	General Conditions - Main Building	24mo	\$3,240,000 \$22.58 /sf
	General Conditions - Demo + Sitework	7mo	\$455,000 \$3.17 /sf
	General Requirements	2.00%	\$1,476,609 \$10.29 /sf
	Bonds	1.00%	\$701,046 \$4.88 /sf
	Insurance	1.00%	\$797,031 \$5.55 /sf
	Permit	N/A	\$0 \$0.00 /sf
	Overhead & Profit	2.50%	\$2,012,503 \$14.02 /sf
	Total Estimated Construction Cost		\$82,512,622 \$574.96 /sf

		143,510. sf	
		PM & C, dated 11/1/2021	
			Cost/SF
		143,510 SF	
		\$3,215,707	\$22.41 /sf
		\$0	\$0.00 /sf
		\$1,448,779	\$10.10 /sf
		\$0	\$0.00 /sf
		\$0	\$0.00 /sf
		\$2,884,635	\$20.10 /sf
		\$2,808,634	\$19.57 /sf
		\$5,202,281	\$36.25 /sf
		\$2,773,269	\$19.32 /sf
		\$119,260	\$0.83 /sf
		\$2,101,737	\$14.65 /sf
		\$0	\$0.00 /sf
		\$3,706,547	\$25.83 /sf
		\$808,105	\$5.63 /sf
		\$1,259,623	\$8.78 /sf
		\$320,000	\$2.23 /sf
		\$41,690	\$0.29 /sf
		\$1,156,955	\$8.06 /sf
		\$1,129,633	\$7.87 /sf
		\$1,475,620	\$10.28 /sf
		\$211,275	\$1.47 /sf
		\$2,434,964	\$16.97 /sf
		\$7,718,534	\$53.78 /sf
		\$949,677	\$6.62 /sf
		\$6,587,230	\$45.90 /sf
		\$1,530,760	\$10.67 /sf
		\$1,061,169	\$7.39 /sf
		\$0	\$0.00 /sf
		\$644,897	\$6.78 /sf
		\$918,585	\$6.40 /sf
		\$52,509,566	\$365.89 /sf
		\$3,112,534	\$21.69 /sf
		\$5,250,856	\$36.59 /sf
		\$1,665,857	\$11.61 /sf
		\$639,650	\$4.46 /sf
		\$63,178,463	\$440.24 /sf
		\$3,648,556	\$25.42 /sf
		\$6,317,846	\$44.02 /sf

	\$73,144,866 \$509.68 /sf
24mo	\$3,240,000 \$22.58 /sf
7mo	\$455,000 \$3.17 /sf
2.00%	\$1,462,897 \$10.19 /sf
1.00%	\$731,449 \$5.10 /sf
1.00%	\$790,342 \$5.51 /sf
N/A	\$0 \$0.00 /sf
2.50%	\$1,995,614 \$13.91 /sf
	\$81,820,167 \$570.14 /sf

		143,510. sf	
		AM Fogarty, dated 11/3/2021	
			Cost/SF
		143,510 SF	
		\$3,257,133	\$22.70 /sf
		\$0	\$0.00 /sf
		\$1,337,250	\$9.32 /sf
		\$0	\$0.00 /sf
		\$0	\$0.00 /sf
		\$2,998,301	\$20.89 /sf
		\$2,997,225	\$20.89 /sf
		\$5,248,677	\$36.57 /sf
		\$2,866,215	\$19.97 /sf
		\$125,510	\$0.87 /sf
		\$2,069,674	\$14.42 /sf
		\$33,000	\$0.23 /sf
		\$3,807,327	\$26.53 /sf
		\$932,699	\$6.50 /sf
		\$1,284,068	\$8.95 /sf
		\$320,100	\$2.23 /sf
		\$39,204	\$0.27 /sf
		\$1,227,508	\$8.55 /sf
		\$1,164,255	\$8.11 /sf
		\$1,590,514	\$11.08 /sf
		\$201,900	\$1.41 /sf
		\$2,376,624	\$16.56 /sf
		\$7,808,863	\$54.41 /sf
		\$979,534	\$6.83 /sf
		\$6,749,820	\$47.03 /sf
		\$1,566,969	\$10.92 /sf
		\$1,055,775	\$7.36 /sf
		\$0	\$0.00 /sf
		\$0	\$0.00 /sf
		\$798,999	\$5.57 /sf
		\$918,585	\$6.40 /sf
		\$53,755,729	\$374.58 /sf
		\$2,857,186	\$19.91 /sf
		\$5,458,260	\$38.03 /sf
		\$1,591,203	\$11.09 /sf
		\$700,396	\$4.88 /sf
		\$64,362,773	\$448.49 /sf
		\$3,716,950	\$25.90 /sf
		\$6,436,277	\$44.85 /sf

	\$74,516,000 \$519.24 /sf
24mo	\$3,240,000 \$22.58 /sf
7mo	\$455,000 \$0.00 /sf
2.00%	\$1,490,320 \$10.38 /sf
0.90%	\$670,644 \$4.67 /sf
1.00%	\$803,720 \$5.60 /sf
N/A	\$0 \$0.00 /sf
2.50%	\$2,029,392 \$14.14 /sf
	\$83,205,076 \$579.79 /sf

		DELTA	
		PM&C - AMF	
			\$70,103
			(\$41,426)
			\$0
			\$111,529
			\$0
			\$0
			(\$448,786)
			(\$113,666)
			(\$188,591)
			(\$46,396)
			(\$92,946)
			(\$6,250)
			\$32,063
			(\$33,000)
			(\$467,502)
			(\$100,780)
			(\$124,594)
			(\$24,445)
			(\$100)
			\$2,486
			(\$70,553)
			(\$34,622)
			(\$114,894)
			(\$215,061)
			\$9,375
			\$58,340
			(\$90,329)
			(\$29,857)
			(\$162,590)
			(\$30,815)
			(\$36,209)
			\$5,394
			(\$154,102)
			\$0
			\$0
			\$0
			(\$154,102)
			\$0
			(\$1,246,163)
			\$61,852
			\$255,348
			(\$207,404)
			\$74,654
			(\$60,746)
			(\$1,184,310)
			(\$68,394)
			(\$118,431)

- Notes:
- 1.) HVAC does not include displacement ventilation system in the Auditorium. This is included on the VE-VM log as well as the alternate for enhanced ventilation.
 - 2.) Other FF&E has been included in the total project budget under soft costs for non-fixed equipment and furniture.
 - 3.) Construction hard costs include security scope. Technology scope has been included in the total project budget under soft costs.
 - 4.) Existing building demolition assumes 89,271 SF for main structure and 5,848 SF for the modular units.
 - 5.) Hazardous materials abatement is per the Nobis environmental survey and report.
 - 6.) Escalation reviewed and agreed on 3.5% per year.
 - 7.) Duration of Phase 2 work (demolition and fields) reviewed and agreed on 7 months in lieu of 5 months for General Conditions.
 - 8.) Assumes permit fees waived.






Value Management Log

Schematic Design Documents



A	B	C	D	E	F			G	H	I	J	K	L	M	N	O	P
Item #	Ext.	VE/VM Item	Discipline/Trade	Ed Prog. Impact	Sustain. Impact	Maint. Impact	Quality of Space Impact	Risks/Impacts	Comments/Details	Ball In Court	Estimated Value (PM+C)	Estimated Value (AM Fogarty)	Reconciled Value (Avg of Estimates)	Status	SMMA Recommendation	Accepted Value	Rejected Value
1	A	Topsoil - export 50% existing topsoil to off-site location in Town; stockpile, stabilize, and re-use on site. Dispose of excess material in Town.	Site					Finding locations in town to take excess materials.	Stockpile 7,500 CY Export 7,500 CY	CMSBC	\$(329,972.18)	\$(347,700.00)	(\$338,836)	Reject			(\$338,836)
1	B	Topsoil - move 50% existing topsoil to on-site location; stockpile, stabilize, and re-use on site. Dispose of excess material in Town.	Site					Finding locations in town to take excess materials.	Stockpile 7,500 CY Export 7,500 CY	CMSBC	\$(426,847.50)	\$(494,100.00)	(\$460,474)	Accept	(\$460,474)	(\$230,237)	
2	A	Suitable Fill - export 50% existing suitable fill to off-site location in Town; stockpile, stabilize, and re-use on site. Dispose of excess material in Town.	Site					Finding locations in town to take excess materials.	Stockpile 15,000 CY Export 15,000 CY	CMSBC	\$(559,675.00)	\$(388,048.00)	(\$473,862)	Reject			(\$473,862)
2	B	Suitable Fill - move 50% existing suitable fill to on-site location; stockpile, stabilize, and re-use on site. Dispose of excess material in Town.	Site					Finding locations in town to take excess materials.	Stockpile 15,000 CY Export 15,000 CY	CMSBC	\$(824,110.00)	\$(723,792.00)	(\$773,951)	Accept	(\$773,951)	(\$386,976)	
3		Reduce number of outdoor classrooms on south of academic wing from 4 to 3.	Site	Y				Impacts Education Plan	We have had limited discussion on utilization of / plan for outdoor classrooms at this time to inform how many should be provided.	CMSBC	\$(36,600.00)	\$(30,500.00)	(\$33,550)	Reject		\$0	(\$33,550)
4		Replace gabion wall seating at outdoor learning areas with concrete seat wall; (4) locations total	Site				Y		Difference in unit price cost assumptions.	CMSBC	\$(91,500.00)	\$(55,724.00)	(\$73,612)	Accept	(\$73,612)	(\$73,612)	\$0
5		Add displacement ventilation system in Auditorium (HVAC + Architectural Components)	Mechanical						SSC recommended	CMSBC	\$230,000.00	\$230,000.00	\$230,000	Reject		\$0	\$230,000
6	A	ALT 1 @ 30 CFM per person, no Aircuity	Mechanical						Cannot be chosen with 6B	CMSBC	\$932,760.00	\$1,104,406.00	\$1,018,583	Reject		\$0	\$1,018,583
6	B	ALT 1 @ 25 CFM per person, no Aircuity	Mechanical						Cannot be chosen with 6A	CMSBC	\$685,100.00	\$775,000.00	\$730,050	Pending			
6	C	Break-out cost for Aircuity	Mechanical							CMSBC	\$175,000.00	\$175,000.00	\$175,000	Reject		\$0	\$175,000
7		Remove electrical from outdoor classrooms	Electrical	Y				Any devices used in the outdoor classrooms must be battery powered and are reliant on the battery life being adequate.		CMSBC	\$(9,760.00)	\$(9,760.00)	(\$9,760)	Reject	(\$9,760)	\$0	(\$9,760)
8		Remove bollard lighting from outdoor classrooms	Electrical	Y						CMSBC	\$(18,056.00)	\$(25,620.00)	(\$21,838)	Reject		\$0	(\$21,838)
9		Reduce advanced lighting controls from 100% addressable lights to 60%	Electrical		Y			This is a MA Energy Code c406 requirement that would need to be replaced with another. This project may not be able to achieve other c406 requirements.		CMSBC	\$(87,541.10)	\$(61,279.00)	(\$74,410)	Reject		\$0	(\$74,410)
10		Diesel Generator in lieu of Natural Gas Generator	Electrical							CMSBC	\$(122,000.00)	\$(112,972.00)	(\$117,486)	Accept	(\$117,486)	(\$117,486)	
11		Remove sink in all (9) Team Commons	Plumbing	Y			Y		Reduces the flexibility of the team commons by eliminating the potential for any projects that need to incorporate water usage.	CMSBC	\$(49,410.00)	\$(55,083.00)	(\$52,247)	Reject			(\$52,247)
12		Remove Fire Pump	Fire Protection					Option Only for Design Development	A fire pump is likely not required. It is in the design pending confirmation that it can be removed after receipt of flow test results.	CMSBC	\$(122,000.00)	\$(152,500.00)	(\$137,250)	Reject			(\$137,250)
13		Remove millwork "work station" from Grade Level 6 Team Commons; retain sink on perimeter of room	Interiors	Y			Y		Use of moveable furniture in lieu of work station. Will allow for different identity, more movement; retains "Maker Space" sink	CMSBC	\$(36,000.00)	\$(38,046.00)	(\$37,023)	Reject	(\$37,023)		(\$37,023)
14		Replace 7,540 SF wood-look metal ceiling panel with 2x2 ACT	Interiors				Y			CMSBC	\$(366,145.18)	\$(323,337.00)	(\$344,741)	Accept	(\$113,765)	(\$113,765)	\$0
15		Reduce quantity of wall tile in the cafeteria to 50%	Interiors				Y			CMSBC	\$(13,664.00)	\$(10,797.00)	(\$12,231)	Reject		\$0	(\$12,231)
16		Remove wood paneling from Media Center walls and ceiling, replace with Painted wall and ceiling	Interiors				Y		Difference in unit price cost assumptions.	CMSBC	\$(71,004.00)	\$(33,696.00)	(\$52,350)	Accept	(\$17,276)	(\$17,276)	\$0
17	A	Reduce interior lightshelf to 10"	Interiors				Y		Cannot be chosen with 17B	CMSBC	\$(17,202.00)	\$(17,934.00)	(\$17,568)	Reject		\$0	(\$17,568)
17	B	Remove interior light shelf	Interiors				Y	Minimal impact on daylighting and glare.	Cannot be chosen with 17A	CMSBC	\$(51,606.00)	\$(53,802.00)	(\$52,704)	Reject		\$0	(\$52,704)
18	A	Replace brick on south elevation with 4x4x16 ground face CMU	Exteriors						Can't be chosen with 18B	CMSBC	\$(84,204.40)	\$(72,929.00)	(\$78,567)	Reject			(\$78,567)
18	B	Replace brick type 3 (dark) 4x4x16 ground face CMU in all locations	Exteriors						Can't be chosen with 18A	CMSBC	\$(56,608.00)	\$(42,456.00)	(\$49,532)	Accept		(\$49,532)	
20		Replace all brick type 1 (light/white) with 4x4x16 ground face CMU	Exteriors						Difference in unit price cost assumptions.	CMSBC	\$(50,020.00)	\$(37,515.00)	(\$43,768)	Accept		(\$43,768)	
21		Remove sunshades from south facing windows at classrooms	Exteriors		Y		Y		Difference in unit price cost assumptions.	CMSBC	\$(102,846.00)	\$(183,958.00)	(\$143,402)	Reject			(\$143,402)
22		Reduce sunshades at south facing classrooms to 1'-0" deep	Exteriors		Y		Y		Difference in unit price cost assumptions.	CMSBC	\$(51,423.00)	\$(90,243.00)	(\$70,833)	Reject			(\$70,833)

										Value Management Log													
Schematic Design Documents																							
A	B	C	D	E	F			G	H	I	J	K	L	M	N	O	P						
Item #	Ext.	VE/VM Item	Discipline/Trade	Ed Prog. Impact	Sustain. Impact	Maint. Impact	Quality of Space Impact	Risks/Impacts	Comments/Details	Ball In Court	Estimated Value (PM+C)	Estimated Value (AM Fogarty)	Reconciled Value (Avg of Estimates)	Status	SMMA Recommendation	Accepted Value	Rejected Value						
23		Replace sunshades on south facing curtainwall with deep mullion caps (assume custom/semi-custom die to make 2.5"x8" cap)	Exteriors		Y				Difference in unit price cost assumptions.	CMSBC	\$(34,160.00)	\$(61,488.00)	(\$47,824)	Reject			(\$47,824)						
24		Remove sunshades from south facing curtainwall	Exteriors		Y		Y		Difference in unit price cost assumptions.	CMSBC	\$(51,240.00)	\$(76,860.00)	(\$64,050)	Reject			(\$64,050)						
25		Reduce length of acoustic mechanical screen by 164 LF	Exteriors		Y			Zoning dependent.		CMSBC	\$(217,887.12)	\$(224,661.00)	(\$221,274)	Accept	(\$221,274)	(\$221,274)	\$0						
26		Remove 934 gsf from building	Architecture				Y	Locker room users will be required to pass through the gym for their use.	Eliminate corridor between locker rooms, OTPT room and gym.	CMSBC	\$(170,922.00)	\$(206,816.00)	(\$188,869)	Accept	(\$188,869)	(\$188,869)	\$0						
27		Reduce entrance canopy by 15 LF of the canopy length. Canopy is 16.5' wide.	Architecture				Y		Canopy can be reduced 15 LF from what is shown on A-103 to keep the projection beyond the admin volume.	CMSBC	\$(49,821.75)	\$(41,175.00)	(\$45,498)	Reject		\$0	(\$45,498)						
27		Reduce height of glass in connector between wings from 12' to 8' on (both) levels = reduction of 1,006 SF curtain wall, replace with opaque wall assembly with phenolic rainscreen cladding.	Architecture				Y		This may benefit comfort, glare reduction and slight impact in improving enclosure performance.	CMSBC	\$(55,229.40)	\$(58,194.00)	(\$56,712)	Accept	(\$56,712)	(\$56,712)	\$0						
28		Replace curtain wall on north wall of art rooms with punched windows. Change 898 SF of CW to 414 SF of punched window and 484 SF of opaque wall assembly with phenolic cladding	Architecture				Y		This may benefit comfort, glare reduction and slight impact in improving enclosure performance	CMSBC	\$(41,724.00)	\$(54,351.00)	(\$48,038)	Reject		\$0	(\$48,038)						
29		Change curtainwall and window glazing from triple to double	Architecture		Y			Significant impact to energy model and building EUI	Difference in unit price cost assumptions.	CMSBC	\$(607,743.00)	\$(480,313.00)	(\$544,028)	Reject		\$0	(\$544,028)						
30		Change CMU in receiving area to 4' FRP Panel with Impact Resistant Sheetrock Above (Including Back-up to Exterior Wall)	Architecture							CMSBC	\$(98,820.00)	\$(113,795.00)	(\$106,308)	Accept	(\$106,308)	(\$106,308)	\$0						
31		Change 4" CMU in gym to Impact Resistant Sheetrock	Architecture							CMSBC	\$(130,832.80)	\$(137,830.00)	(\$134,331)	Accept	(\$134,331)	(\$134,331)	\$0						
TOTALS											DO NOT TOTAL	DO NOT TOTAL	DO NOT TOTAL		(\$2,310,840)	(\$1,740,145)	(\$879,934)						
															SMMA Recommendation	Accepted Value	Rejected Value						
														MAXIMUM POTENTIAL SAVINGS									
														\$ (3,817,126.63)									
														*Includes Item 5 Add for Aud. Displ. Ventilation									
														*Excludes Item 6 Add for Enhanced Ventilation									

Concord Middle School

Estimated Cost for \$103.7M Warrant Article / Feb 3rd Town Vote

Description	Warrant Article Cost
20 Construction	
Construction	\$80,772,019
Subtotal	\$80,772,019
30 Architectural & Engineering	
Designer - Basic Services	\$7,100,000
Geotechnical Engineering CA	\$165,000
Geoenvironmental Engineering-allowance	\$175,000
Site Survey	\$20,000
Survey of Existing Conditions / Wetlands	\$0
Hazardous Materials	\$156,600
A&E Sub Consultants	\$95,000
Other Reimbursable Costs	\$20,000
Printing (Over the Minimum)	\$20,000
Testing & Inspections	\$250,000
Subtotal	\$8,001,600
40 Administrative Costs	
Owner's Project Manager Basic Services	\$3,643,580
Commissioning Agent	\$280,000
Advertising	\$30,000
Other Administrative Costs	\$50,000
Other Project Costs (Moving)	\$200,000
Utility Fees	\$300,000
Legal	\$0
Subtotal	\$4,503,580
50 Furniture, Fixtures and Equipment	
Furniture, Fixtures and Equipment	\$1,365,000
Security	\$0
Technology	\$1,260,000
Subtotal	\$2,625,000
Sub-Total	\$95,902,199
70 Contingency	
Construction Contingency	\$4,907,999
Owner's Bid Contingency	\$2,040,000
Owner's Contingency	\$849,801
Subtotal	\$7,797,801
Total	\$103,700,000

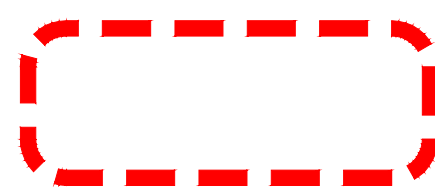
Note: Excludes \$1.5M initial funding for Feasibility and Schematic Design Phase



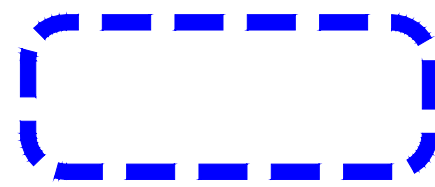
Schematic Design Progress



LEGEND:



POTENTIAL STOCKPILE AREA



POTENTIAL STOCKPILE AREA
EXPANSION (ALTERNATE)

SMMA

SMMA
1000 Massachusetts Avenue
Cambridge, MA 02138
P: 617.547.5400 F: 800.648.4820

EWING
COLE

Ewing Cole
Federal Reserve Bank Building
100 North 5th Street
Philadelphia, PA 19106-1500
P: 215.923.2020 F: 215.574.0952
EC Project No. 20190666



Concord Middle School

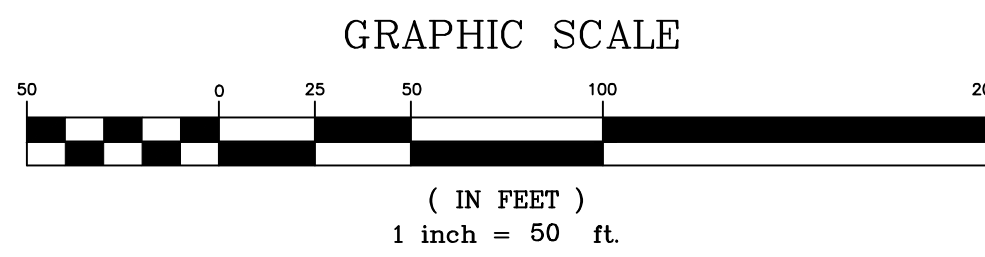
835 Old Marlboro Road
Concord, MA 01742

MARK DATE DESCRIPTION
ISSUE LOG
△ = CLOUDED CHANGE

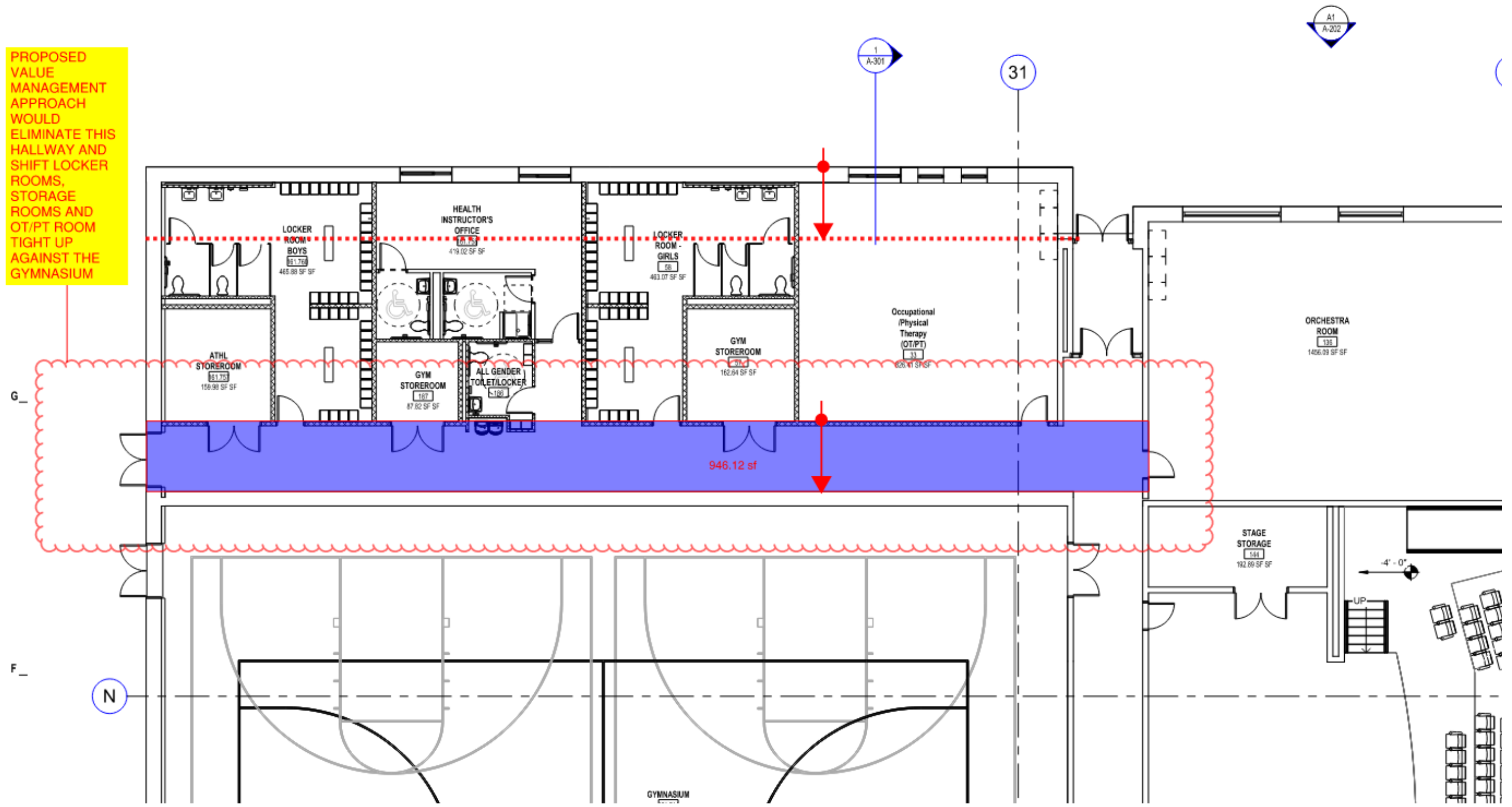
NOT FOR CONSTRUCTION

SCALE 1"=50'
DRAWN BY ECV
CHECK BY MJD
PROJ. ARCH. ENGR. MR/MG
PROJ. MGR. KWO
JOB NO. 19153.00
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POTENTIAL
STOCKPILE AREAS



PROPOSED
VALUE
MANAGEMENT
APPROACH
WOULD
ELIMINATE THIS
HALLWAY AND
SHIFT LOCKER
ROOMS,
STORAGE
ROOMS AND
OT/PT ROOM
TIGHT UP
AGAINST THE
GYMNASIUM



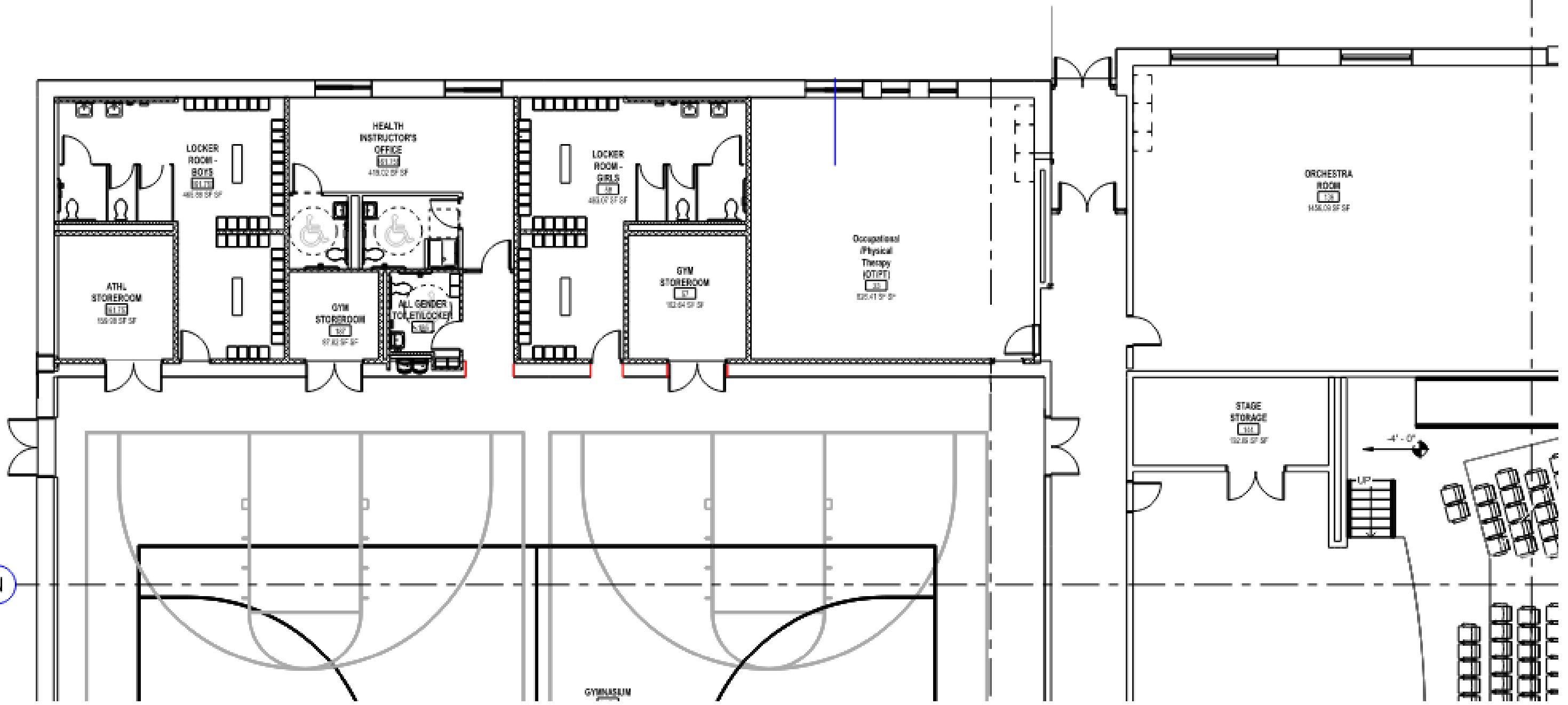


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Meeting Minutes

Concord Middle School Building Committee
Meeting Minutes
November 5th, 2021

PRESENT: Dawn Guarriello, Laurie Hunter, Pat Nelson, Matt Root, Charles Parker, Frank Cannon, Jared Stanton, Chris Popov, Jon Harris, Matt Johnson, Russ Hughes, Justin Cameron, Heather Bout, Court Booth, Stephen Crane, Alexa Anderson, Laurie Hunter, Peter Fischelis

PRESENT FROM HILL INTERNATIONAL: Ian Parks, Peter Martini

PRESENT FROM CONCORD MUNICIPAL LIGHT PLANT: David Wood

PRESENT FROM SMMA/EWING COLE: Lorraine Finnegan, Matt Rice

MEETING ORGANIZER: Dawn Guarriello

Call to Order

Dawn Guarriello called the meeting to order at 7:30 A.M. via Zoom Virtual Conference call. A recording of the meeting will be made available at the Concord Public School's project page and Town of Concord's website.

Approval of Minutes

Co-Chair Dawn Guarriello motioned to table meeting minutes.

Correspondence and Communication

Heather Bout reported that estimation documents are now available online as requested. She reported a letter was received from SEPAC regarding what items in the schematic design were viewed as non-negotiable as the committee began evaluating options to value engineer the project.

Heather Bout reported on the September 23rd community forum, mentioning questions from the public were raised regarding solar panels, chorus classroom, types of seating in the auditorium, and whether the building is fully hardwired. She conveyed a general enthusiasm for the project from the community responses.

Heather Bout also reported on the community forum on October 28th. She reiterated there was general enthusiasm from the public. She noted questions and comments included topics like meeting times, concerns about value engineering, questions about funding and other private funding options. Dawn Guarriello noted forums had about 35-40 people.

Heather Bout reported "coffee hours" have been taking place with smaller groups in the community. She also noted a panel on sustainability would be taking place in the coming weeks as well as a public forum set up for the week of November 18th to review cost estimates.

Heather Bout reported Alexa Anderson is close to launching the introduction videos discussed in the last SBC meeting.

New Business

Dawn Guarriello reported there was no new business.

Schematic Design (SD) Cost Estimate

Dawn Guarriello asked to table questions from the public until after the committee had addressed cost estimating and value engineering.

Ian Parks presented the schematic design estimating package and summarized the estimating process. PM&C and AM Fogarty were hired as the professional estimators. The project team held a reconciliation meeting on October 1st with the two firms to ensure there were no discrepancies in their estimates with respect to project scope or assumptions. PM&C and AM Fogarty had a \$1.4 million difference between their two estimates. The reconciled estimate summary was reviewed and the reconciled value was arrived at by taking the average of the two cost estimates. The design and estimating contingency was carried at 10%. There was a lot of discussion at the estimate reconciliation meeting surrounding escalation, which was agreed upon by both estimators to be carried at 3.5% rather than at 4% previously reported to the committee. The project team broke out General Conditions costs for the Phase 2 demolition and site work and agreed to adjust to 7 months rather than 5 months as previously shown on the project schedule.

Dawn Guarriello noted demolition of the existing school would commence after the new school has been built and occupied.

Ian Parks reported a reconciled construction estimate of \$82,512,622 at a cost of \$574.96/sf. This estimate did not include a displacement ventilation system in the auditorium. Displacement ventilation system costs are found in the Value Management log (VM log). Technology and FF&E (not fixed to the building) are included in soft costs, and permitting fees were assumed to be waived. Other FF&E (fixed to the building) are included in the construction cost.

Ian Parks reviewed a cost breakdown for the upcoming Town Vote and noted the construction estimate came in over the project target cost of \$100 million. However, a plan is in place to manage cost and a list of VE-VM items are being proposed for changes that could be made to the project for value engineering. He reported that the VM log contained a maximum potential savings of \$3.8 million as well as items that could add cost, but enhance the project.

Value Management/Engineering

Court Booth asked who generated the VM log. Ian responded that the project team (Hill and SMMA) compiled this list of items that would be good to consider for value management. Lorraine Finnegan responded that not all the items were suggested to be removed, said she could provide recommendations on what SMMA would remove, noting that some of the items in VM-log would impact operating costs for the school.

Charles Parker requested clarification on certain mechanical line items.

Ian Parks reviewed the 31 items in the VM log which were broken down by discipline/trade. The biggest savings from a value engineering perspective could be found in site work.

Ian Parks reported options surrounding excavation and removal of topsoil. Lorraine Finnegan noted exporting topsoil would be favorable given that on site space is limited. Savings for leaving topsoil on site are based largely on not having to use trucks to bring the soil to an off-site location.

Ian Parks reported options to move suitable fill to an on-site or off-site location for re-use thereafter, diverting soil from disposal sites, which reflects significant savings to the project.

Matt Johnson requested sustainability, road and infrastructure, and community impacts to be taken into consideration when evaluating whether to move topsoil and suitable fill on-site or off-site. The committee agreed that efforts should be made to re-use topsoil and suitable fill on-site.

Ian Parks paused the meeting to show potential locations for on-site topsoil and suitable fill stockpiles. Lorraine Finnegan agreed with Matt Johnson that keeping the suitable fill and topsoil on site would be ideal, but also pointed out coordination with the school would be necessary to keep the stockpiles at the proposed on-site locations. This phase of the project would be happening simultaneously with school operations.

Ian Parks presented ventilation add-ons. The committee deliberated while focusing primarily on the need for aircurty.

Lorraine Finnegan recommended against the acceptance the item 9 on the VM log. The committee deliberated.

Chris Popov recommended tabling any decisions regarding VE-VM until the next meeting. Matt Johnson recommended setting a budget and then revisiting the VM log once budget had been approved.

Peter Martini reported on how the estimating firms established escalation rates in the reconciled construction estimate. Lorraine Finnegan contributed by explaining escalation and how it would carry through until construction commenced.

Public Comments

Carrie Rakin advocated to not make any cuts to the project in terms of value engineering and proposed the committee bring the project to a town vote as is it stands.

Carmin Reiss urged the committee not to send out the bond council warrant article without a fixed budget number. Chris Carmody confirmed that a warrant could be held until November 12th.

Discussion ensued between Carmin Reiss and the committee.

Louis Salemy noted concerns surrounding the construction contingency of 5%. He believed it should be 8-10%.

Photovoltaic scope

Dawn Guarriello reported the decision had already been made for the building to be net zero ready. The structure can support the weight of renewable energy infrastructure on the roof. Electrical equipment, wiring to canopies, and canopy foundation systems are not included in the project budget.

Stephen Crane added that establishing solar panels is a separate project from the school construction. The solar scope is being designed simultaneously and will be coordinated with the school design and installation.

David Wood commented on photovoltaic scope questions and reported on solar panel project schedule as it relates to the new middle school project.

Ian Parks added that the photovoltaic scope can be coordinated with the new school construction if desired by the Town.

Schedule Update

Ian Parks reported that there was no change in scheduling.

Cash flow Update

Ian Parks reported there was no change in project cash flow.

Next Steps

Next meeting will be Friday, November 12th, 2021

Adjournment

Stephen Crane motioned for the meeting to be adjourned at 10:00 AM. The motion to adjourn was seconded and carried unanimously.

Details of this meeting can be found on the youtube link below:

[Concord Middle School Building Committee - November 5, 2021 - YouTube](#)

Concord Middle School Building Committee
Meeting Minutes
November 12th, 2021

PRESENT: Dawn Guarriello, Laurie Hunter, Pat Nelson, Matt Root, Charles Parker, Frank Cannon, Jared Stanton, Chris Popov, Jon Harris, Matt Johnson, Justin Cameron, Heather Bout, Court Booth, Stephen Crane, Alexa Anderson, Peter Fischelis

PRESENT FROM HILL INTERNATIONAL: Ian Parks, Peter Martini

PRESENT FROM SMMA/EWING COLE: Matthew Rice

MEETING ORGANIZER: Dawn Guarriello

Call to Order

Dawn Guarriello called the meeting to order at 7:30 A.M. via Zoom Virtual Conference call. A recording of the meeting will be made available at the Concord Public School's project page and Town of Concord's website.

Approval of Minutes

Co-Chair Dawn Guarriello noted the minutes of September 16, 2021 and October 7th, 2021 were sent to the committee. Dawn noted that the September 16th meetings minutes did not mention the conclusion or decisions made by the committee on certain topics covered. She requested that meeting minutes cover where the committee leaves off, and any decisions made during the meetings.

Matt Johnson motioned to approve the amended September 16th and October 7th meeting minutes; Heather Bout seconded the motion. The motion carried unanimously.

Correspondence & Communications

Heather Bout reported to the committee that there were three emails from residents requesting that the building committee not make any further cuts to the project budget. Heather also reported that a list of community outreach events was sent to the committee. She noted that there was an average of four events a week for the proceeding weeks.

Heather Bout requested that committee members send out the list of events to their personal network of contacts in the town of Concord.

Pat Nelson requested that the meeting minutes on the town website stay up to date.

Schematic Design (SD)

Matt Johnsons reported on the select board meeting. Matt mentioned the select board voted on a not-to-exceed budget of \$104 million, which is higher than the most recent estimate for the project. This motion passed unanimously by the select board.

Dawn Guarriello read the opening paragraph of a letter from a member of the Concord finance committee and addressed the main points. Christine Reynolds commented further on the tax increases for households as it relates to financing the project. Property taxes could be increased around 6-7% on this one project alone, which could result in an 8-10% increase in overall property taxes when combined with annual interest on existing debt obligations. Christine Reynolds expressed concern related to the community's ability to absorb tax increases at those rates.

Matt Root reported on the sustainability sub-committee meeting held on Wednesday, November 10th. Five items from the VM-log were recommended to be accepted by the sub-committee, totaling \$625,000. Eight items were recommended to be rejected by the sustainability sub-committee.

Matt Root reported that no consensus was found on five items in the VM-log. Ian Parks reported an updated cost for a few line items in the sustainability sub-committee item analysis. One of the sustainability sub-committee line items for which there was no consensus was to raise cubic feet per minute from 20 to 25 per person, but there were concerns from the sub-committee regarding the pricing of this change. Discussion ensued regarding aircurity and enhanced ventilation.

Court Booth requested clarification from Ian Parks on how items on the VM-log are selected. Ian Parks responded the items on the VM-log were presented by the design team based on the exact scope of the project.

Matt Root reported on the displacement ventilation (DV) line item. DV is driven by health, removes pollutants and viruses away from people faster. Matt Root noted that he would recommend enhanced ventilation (EV) over displacement ventilation.

Heather Bout commented that if the committee was going to expand the project scope as it relates to VM-log, she would prefer to add items relating to the educational program rather than enhanced ventilation. Discussion ensued relating to this comment.

Peter Fischelis asked the committee if there are any federal grants that could be obtained to help fund the enhanced ventilation system. Stephen Crane responded that he believed those federal funds were being allocated to older buildings with poor ventilation and the funds would need to be spent by 2024, which would not line up with the project schedule.

Ian Parks presented the VM-log including SMMA recommendations for acceptance in the amount of \$2,310,840.

Dawn Guarriello opened the floor to discussion on any of the line items.

Matt Johnson recommended maintaining electricity to the outside classrooms, hence rejecting item 7 in the VM-log for \$9,000. The committee agreed.

Stephen Crane proposed that the committee establish a fixed budget number before selecting which line items in the VM-log to accept or reject. Pat Nelson recommended going through the list to establish a budget number to present to the town.

Ian Parks continued to present VM-log acceptance recommendations by SMAA.

The committee discussed and agreed that reducing outdoor classrooms should be rejected.

Town moderator, Carmin Reiss, noted that the public hearing for the Concord Middle School project wouldn't be until December 16th, and that the committee could establish a not-to-exceed number for the ballet with the idea that the committee would still have time to reduce it further as the committee sees fit.

Matt Johnson reported that it was the hope of the select board that the building committee would come to a budget number below the \$104 million not-to-exceed budget voted by the select board.

The building committee accepted replacing gabion outdoor seating with concrete. Heather Bout voiced concern, but upon clarification retracted her concern.

The building committee rejected reducing lighting controls from 100% addressable lights to 60% as both SMAA and the sustainability sub-committee also recommended rejecting.

The building committee rejected removing sinks from team commons.

Reducing the interior lightshelf to 10" was also rejected by the committee.

The building committee accepted replacing 7,540 square feet of wood-look metal ceiling panel with 2x2 acoustic ceiling tiles (ACT). Matthew Rice elaborated on what this removal would entail, detailing that it would be replacing approximately 1/3 of the ceiling tiles without altering the aesthetic design dramatically. The same replacement of ceiling panels specifically in the media center was also approved by the building committee.

The building committee accepted the reduction in the length of the acoustical mechanical screen by 164 square feet as had been recommended by SMMA. Matthew Rice further elaborated on the specifics on this line item from a design perspective and comfortability of removing a portion of this screening at this time.

The building committee approved the removal of 934 gross square feet from the building. Laurie Hunter reported the removal of the specified square footage would have a limited impact on the educational program.

Matthew Rice explained the line item pertaining to reducing the height of the glass connector between wings. The building committee accepted this item.

The committee accepted changing Concrete Masonry Units (CMU) to Fiberglass Reinforced Plastic (FRP) panels as recommended by the sustainability sub-committee and SMMA. The committee also approved the same replacement in the gymnasium.

Ian Parks presented the idea of a bidding contingency with the committee; contingency reserved specifically for the bid period in the event of a bid overage. Unused bidding contingency would be returned after the construction bid is accepted. The other option is to increase the Construction Contingency in the event that the bid comes in over the construction budget. Matt Johnson clarified that the select board would be interested in a bidding contingency.

In summary, the committee accepted \$912,147 from the VM-log, reducing the construction scope to \$81,600,017. Pending items on the VM-log will be reviewed at the next SBC meeting.

Ian Parks used excel to calculate costs for this funding request, including a 2.5% bidding contingency of \$2,040,000 to bring the request to \$103,632,958.

Public Comment

Christine Reynolds urged the building committee to present a budget of \$100 million as the project was originally presented to the public in a range of \$80-100 million. Karlen Reed urged the committee vote on the cost as it stands at \$103,632,958 without cutting scope unnecessarily.

Schematic Design (SD) Continued

Pat Nelson motioned to approve funding not-to-exceed \$104 million, Heather Bout seconded. Matt Johnson requested that the number be exact, rather than a not-to-exceed number to put on the ballot. He recommended the exact number as shown in the amount of \$103,632,958 be voted on rather than a not-to-exceed value. Pat Nelson withdrew her motion and motioned to approve a value of \$103,700,000 for the ballot. Heather Bout seconded the motion. The motion passed unanimously. Stephen Crane, Justin Cameron, and Matt Root were no longer present in the meeting for the vote.

Next Steps

Next meeting will be Thursday, November 18th, 2021. An additional meeting will be December 2nd, 2021.

Cash flow Update

Dawn Guarriello and Ian Parks reported there were no changes to cash flow.

Scheduling

Ian Parks reported there was a change in the phase 2 demolition and site work schedule from 5 months to 7 months.

Adjournment

Dawn Guarriello called for the meeting to end at 10:30am. Court Booth motioned to adjourn; Heather Bout seconded. Motion to adjourn carried unanimously.

Concord Middle School Building Committee
Meeting Minutes
November 18th, 2021

PRESENT: Dawn Guarriello, Laurie Hunter, Pat Nelson, Matt Root, Charles Parker, Frank Cannon, Jared Stanton, Chris Popov, Jon Harris, Justin Cameron, Heather Bout, Court Booth, Stephen Crane, Alexa Anderson, Peter Fischelis, Russ Hughes, Amanda Kohn

PRESENT FROM HILL INTERNATIONAL: Ian Parks, Peter Martini, John Cutler

PRESENT FROM SMMA/EWING COLE: Matthew Rice, William Smazewski

MEETING ORGANIZER: Pat Nelson

Call to Order

Co-Chair Pat Nelson called the meeting to order at 7:30 A.M. via Zoom Virtual Conference call. A recording of the meeting is not available as it was accidentally not recorded.

Correspondence & Communications

Heather Bout reported to the committee that there were two emails from residents requesting that the building committee not make any further cuts to the project budget. She also reported that there were several community outreach events in the upcoming weeks, including a coffee hour at the library on 11/18 at 7pm.

New Business

Dawn Guarriello announced that Amanda Kohn had been appointed as the new director of sustainability.

Schematic Design (SD)

Dawn Guarriello reported that in the previous CMSBC meeting the committee reviewed the VM-log in relation to recommendations by SMMA. She also reported that the project cost going on the warrant article is \$103,700,000.

Ian Parks reviewed items that were approved and rejected in the VM-log from the previous CMSBC meeting and outlined pending items for the committee to review and respond to.

The committee discussed switching the generator from natural gas to diesel. Russ Hughes added that most schools were on natural gas, but he believed there would be no problems with a diesel generator. Heather Bout raised a question regarding the frequency with which a diesel generator needs to be refilled and the impact it might have on the students. The committee deliberated and ultimately concluded that refueling the generator would not be a detrimental factor to the educational program. The committee agreed with changing the generator from natural gas to diesel, accepting item 10 on the VM-log.

Ian Parks reported that removal of the fire pump could not be accepted at this time until adequate testing had been done to ensure the pump is not required, hence the need to reject item 12 on the VM-log.

Laurie Hunter expressed her concern regarding the removal of the millwork tables, citing a negative impact to the educational program. Matthew Rice presented designs to the committee to explain the millwork tables in question and their functionality. The committee deliberated and rejected the item as recommended by Laurie.

Matthew Rice explained VM log items 18A and B which pertained to replacing brick type 3 with ground face CMU. The Committee accepted 18B and rejected 18A.

Charles Parker reported that the sustainability committee advised against the approval of the four VM items relating to sunshade changes. Matt Root clarified that the sustainability committee recommended VM log line item 23; the replacement of sunshades on south facing wall curtainwall with deep mullion caps. The committee deliberated on these sunshade related items. All the changes were rejected by the committee including the replacement of sunshades on the south facing wall with a deep mullion cap.

Ian Parks reviewed items 1A, 1B, 2A, and 2B related to diverting topsoil and suitable fill from disposal sites. The risk remains in trying to find a home for 100% of the exported topsoil and suitable fill somewhere off site. Therefore, he recommended that the committee accept 50% of items 1B and 2B at a value of \$617,212 to mitigate risk. Matt Rice added that SMMA agrees with this approach.

Some committee members raised concern regarding having suitable fill and topsoil on the fields, citing damage to the fields and danger to the students. Laurie Hunter responded that the fields would not be in use once construction began regardless of whether there were stockpiles on the field. Additionally, she stated that the school was expecting the fields to be out of commission for at least a year after construction had finished and planned on contacting proximate towns for field use while the fields are reseeded post construction.

The committee accepted 50% of items 1B and 2B at a value of \$617,212.

The committee proceeded to deliberate on enhanced ventilation and the pending item 6B for 25 CFM and no auctuity. Charles Parker advocated to give the committee more time to discuss advanced ventilation in the future. The committee made no decision with regards to advanced ventilation with the intent of reviewing summary information at the December 2nd SBC meeting in order to make a decision on this pending item.

Laurie Hunter noted that the meeting was accidentally not recorded.

Court Booth read items accepted today on the VM-log line by line to ensure the approved and rejected VM changes was reconciled. Ian Parks confirmed and reported that the thirteen (13) accepted items to date totaled \$1,740,145, bringing the estimated construction cost to \$80,772,019.

Public Comment

Public comments were not recorded for this meeting.

Next Steps

Next meeting will be Thursday, December 2nd, 2021.

Cash Flow Update

Dawn Guarriello and Ian Parks reported there were no changes on cash flow.

Scheduling

Ian Parks reported there was no change to the schedule.

Adjournment

Pat Nelson called for the meeting to end at 10:30am. Court Booth motioned to adjourn; Heather Bout seconded. Motion to adjourn carried unanimously.

Approved