

Coakley Middle School

Norwood Public Schools

Middle School Building Committee

July 18, 2022

Agenda

July 11, 2022

- ◆ **Votes to approve: meeting minutes, & vendor invoice package**
- ◆ **Recommendation of IDS as BMS Automation Consultant**
- ◆ **CMr Selection Process Update**
 - Vote to approve RFQ Short List for RFP Solicitation
- ◆ **Project Update**

July 18, 2022

- ◆ **Votes to approve: meeting minutes**
- ◆ **Project Update**
 - Final review Design Development Scope Revision Options for budget management
 - **VOTE** to accept scope revisions for budget management
 - **VOTE** to submit Design Development package to the MSBA



COAKLEY
MIDDLE
SCHOOL



Ai3 Architects, LLC
Compass Project Management

LEVELING: Items already taken through document development

ITEM #		ITEM & DESCRIPTION	ACCEPTED	HOLD	DECLINED	NOTES
BLDG EXT	1	reduce rooftop unit screens	-\$17,000.00			systems coordination
	2	reduce roof overhangs (roof area reduction of 410 sf)	-\$35,875.00			already taken - roof assembly @ \$87.5/sf
BUILDING INTERIOR	3	modify wall types	-\$25,000.00			Based on acoustic report
	4	reduce casework in band by 6 lf	-\$4,620.00			
	5	move VR lab bench to FF&E	-\$19,600.00			
	6	remove acid waste piping/system	-\$352,200.00			
	7	remove item 1060 - already owned in 1048	-\$17,760.00			Double owned curtains
	8	remove item 1062 - already owned in 1047	-\$25,920.00			Double owned curtains

TOTAL DEDUCT ESTIMATE LEVELING		
ACCEPTED	HOLD	DECLINED
\$497,975	\$0	\$0

ORGANIZING CATEGORIES

LEVELING: \$497,975
Items already taken through document development

PRIORITY 1: \$3,579,968
Items are highly recommended to accept - typical in school construction

PRIORITY 2: \$2,284,488
Items are recommended - some typical in school construction, some District specific - may require discussion

PATH TO BUDGET →

Total Reduction of Leveling, Priority 1 & Priority 2 Categories: \$6,362,431

Target Reduction: \$6,268,439

PRIORITY 3: \$2,453,506
Items may impact function, maintenance, or durability - use this category if any of the items in the lists above are unacceptable

PRIORITY 1: Items are highly recommended to accept - typical in school construction

ITEM #		ITEM & DESCRIPTION	ACCEPTED	HOLD	DECLINED	NOTES
PHASING	9	Construct Mock-up wall as part of building	-\$50,000.00			
BUILDING - EXTERIOR	10	remove exterior mounted sunshades at classrooms & band/choral - interior blinds are included - 475'lf vertical; 26'lf horizontal	-\$99,680.00			keep exterior mounted sunshades at commons, media center, & gymnasium
	11	remove exterior sunscreens @ media center and commons - 519 lf horizontal	-\$93,420.00			keep exterior sunscreens @ gymnasium
	12	reduce height of 4th floor by 2' (from 16' to 14')	-\$340,000.00			wall @ \$75/sf, perimeter length = 1200'
	13	use PVC trim at entrance canopies ILO exterior metal panel (350 sf)		-\$10,500.00		metal panel @ \$80, PVC @ \$50
	14	use fiber cement exterior cladding ILO exterior metal panel @ Media Center (4,875 sf)		-\$156,000.00		
	15	remove 300sf of exterior envelope - fiber cement @ FLR 2 above kitchen	-\$26,025.00			
	16	remove 300sf of exterior envelope - brick @ FLR 2 above kitchen	-\$23,325.00			
	17	Reduce underslab insulation from 100% area to 2' at perimeter (reduce from 70,972 sf to 5,000 sf)	-\$164,930.00			
BUILDING - INTERIOR	18	remove transoms at classroom entries	-\$98,400.00			
	19	use ACT ILO painted GWB at toilet rooms - 5217 sf	-\$20,868.00			
	20	use ACT ILO painted GWB at locker rooms 1577 sf	-\$6,308.00			
	21	remove GWB soffits in classrooms - ACT to extend to wall - 1500 lf	-\$120,000.00			
	22	remove GWB soffits in corridors above lockers - 735 lf	-\$16,295.00			
	23	reduce size of accordion folding fire door by 25.5 sf	-\$7,650.00			Reduce width from 16'-6" to 13'-6" @ \$300/sf
	24	reduce accordion folding doors to 140 sf and replace with (5) double swing doors	-\$45,890.00			keep one accordion door at wide opening by stair 2, floor 2
	25	reduce climbing wall in gym to size that matches existing climbing wall	-\$61,950.00			Existing approx. 37'x8'
	26	remove sliding marker boards in student collab space - provide 30 sf MB instead	-\$7,340.00			
	27	Modify railing design at auditorium - reduce cost from \$400 to \$300 lf	-\$13,500.00			Reduce complexity and modify materials
	28	remove wood wall panels in media center & replace with fabric acoustic panels	-\$19,485.00			
	29	move kiln to FF&E	-\$10,000.00			
	30	remove trash can cabinets in student commons	-\$19,200.00			
	31	reduce wall tile in all multi-fixture bathroom from all 4 walls to ceiling to be wet wall to ceiling and other walls to 4' (reduce by 1,500 sf)	-\$42,450.00			
	32	further reduce wall tile in GIRLS multi-fixture bathroom from item above to only wet walls having tile to ceiling, other walls painted GWB (reduce by 600 sf)	-\$16,980.00			
	33	reduce wall tile in single use bathroom from all 4 walls to ceiling to be wet wall to ceiling and other walls to 4' (reduce by 3,300 sf)	-\$93,390.00			
	34	further reduce tile in single use bathrooms to be 4' at all walls (reduce by 1,400 sf)	-\$39,620.00			
	35	further reduce tile in single use bathrooms to be 4' at wet wall only (reduce by 2,600 sf)	-\$73,580.00			
	36	Remove tile in student commons space other than at piers up to 4' AFF (reduce by 1,400 sf)	-\$39,620.00			
	37	remove tile in corridor other than around classroom entries or at piers - height at 4'AFF (reduce by 12,000 sf)	-\$339,600.00			
	38	use FRP panels in custodial mop areas ILO ceramic tile (160 sf)	-\$2,720.00			

PRIORITY 1: Items are highly recommended to accept - typical in school construction

ITEM #	ITEM & DESCRIPTION	ACCEPTED	HOLD	DECLINED	NOTES	
SITE	39	reduce landscape category by 10%	-\$74,328.00			May impact LEED credits (2)
	* 40	Remove poured in place safety surface & replace with grass & small paved area (30'x30')	-\$127,615.05			
	* 41	remove playground equipment	-\$150,000.00			
	42	Remove lit bollards from electrical site plan	-\$12,000.00			Not needed per code & landscape owns ornamental at same location
	43	remove low seat wall - replace with benches	-\$49,023.00			8 benches added
	44	change green screen fencing to planting buffer	-\$74,575.00			
	45	Remove school entry signs from project	-\$70,000.00			
	46	reduce quantity of ornamental benches from 15 to 7	-\$28,000.00			
	47	reduce quantity of bike racks from 16 to 8	-\$6,800.00			
	48	use existing athletic benches	-\$15,000.00			Quantity - 6
	49	use existing soccer goals	-\$18,000.00			Quantity - 4
	50	remove concrete pavers and replace with broom finished concrete - 2,107 sf	-\$52,675.00			At back of building
	51	switch from concrete to asphalt at walkways further away from building - approx 9,963 sf	-\$87,674.40			
	52	use bituminous curb ILO granite @ locations away from building - approx 7,510 lf	-\$193,382.50			
	53	remove asphalt sidewalk at perimeter access road adjacent to fields. Remove retaining wall and use plantings to stabilize sloped earth from road down to field.	-\$181,540.00			Walking path continuity would cross perimeter road twice and continue along building
	54	remove ornamental fence @ playground - 186 lf	-\$23,250.00			
55	change ornamental fence to wire mesh fence - 672 lf	-\$20,160.00			quantity is less the playground fence above	
56	remove outdoor dining tables & benches & reuse existing	-\$50,421.00				
SYSTEMS	57	remove "power scrubber" from lower level kitchen & add in typical 3-pot sink	-\$18,000.00			
	58	reduce the size of the interactive displays from 86" to 75" at all locations (96 locations)	-\$105,600.00			
	59	further reduce the size of the display from 75" to 65" in smaller rooms (16 locations)	-\$17,600.00			
	60	reduce digital signage budget from \$85,000 to \$65,000	-\$20,000.00			Reduce quantity of monitors
	61	Remove portable sound system	-\$2,000.00			possibly could be purchased at a later time -FF&E
	62	Remove portable assistive listening system	-\$1,500.00			possibly could be purchased at a later time -FF&E
	63	make basketball hoops manual ILO electric	-\$13,500.00			9 locations
	64	reduce lighting package by 10%	-\$100,098.00			
	65	provide aluminum power distribution feeders (sizes over 100 amps) ILO copper feeders (provide copper feeders for 100 amps and lower)	-\$175,000.00			

TOTAL DEDUCT		
PRIORITY 1		
ACCEPTED	HOLD	DECLINED
\$3,579,968	\$166,500	\$0

PRIORITY 2: Items are recommended - some typical in school construction, some District specific - may require discussion

ITEM #	ITEM & DESCRIPTION	ACCEPTED	HOLD	DECLINED	NOTES	
CONCESSIONS 66	Concessions building move to be an add-alternate	-\$410,448.00				
BUILDING - EXTERIOR *	67	remove overhead coiling doors at custodial and kitchen loading dock and replace with double swing doors			-\$5,600.00	
	68	use fully adhered EPDM (rubber) roof membrane ILO fully adhered PVC roof membrane	-\$123,487.50			reduce \$1.50/sf
	69	reduce quantity of CW by 1,350 sf	-\$98,550.00			reduction of CW that has spandrel panels
	70	change 1,500 sf of CW to SF	-\$37,500.00			Quantity reflects taking previous VE item
	71	reduce roof overhang @ all floors by 6" (750 sf)	-\$65,625.00			roof @ \$87.5/sf
	72	further reduce roof overhang @ all floors by 6"	-\$65,625.00			Add to item above
BUILDING - INTERIOR *	73	use floor mounted toilet partitions ILO ceiling hung			-\$12,300.00	41 locations
	74	remove wood slat walls in student commons and replace with painted GWB w/ reveals (1180 sf)	-\$58,174.00			
	75	reduce wood paneling in auditorium - @ stage apron - 140 sf	-\$11,102.00			
	76	remove wood soffits @ both commons - replace with painted GWB - 2281 sf	-\$132,298.00			
	77	remove wood panel walls @ both commons - replace with painted GWB - 1294 sf	-\$102,614.20			
	78	change 2,540sf of interior storefront to hollow metal	-\$25,400.00			
	79	reduce bleacher capacity in gymnasium from 296 to 218	-\$20,670.00			Include only at main court
	80	change 303 sf of interior CW to 260 sf of SF - upper commons - reduce size & add 60 sf of horizontal soffit	-\$11,640.00			
	81	replace ceramic floor tile in restrooms with poured epoxy - 4,200 sf	-\$50,400.00			
	82	replace ceramic floor tile in locker rooms with poured epoxy - 285 sf	-\$3,420.00			
	83	use pured epoxy floor in lower level kitchen ILO quarry tile (1,847 sf)	-\$25,858.00			Tile = \$32sf Poured floor = \$18sf
	84	use painted concrete ILO stained concrete for floor in PTS (414 sf)	-\$3,933.00			polished concrete @ \$12.00sf
	85	remove open shelving casework in fullsize typical classrooms in grades 6, 7, & 8	-\$305,025.00			reduce from 1,356 LF to 485 lf
	86	change upper wall cabinets to open shelving units in teaching spaces - 1257 lf	-\$56,565.00			
	87	use chemical resistant laminate ILO epoxy counters in spaces listed		-\$83,400.00		

PRIORITY 2: Items are recommended - some typical in school construction, some District specific - may require discussion

ITEM #	ITEM & DESCRIPTION	ACCEPTED	HOLD	DECLINED	NOTES	
SITE *	88	remove 9 of the 10 outdoor storage units			-\$112,500.00	keep one for turf maintenance equipment
	89	remove 20' tall ball control netting	-\$95,800.00			
	90	use asphalt walkways ILO concrete @ all remaining locations - 19,269 sf	-\$169,567.20			
	91	use concrete walkways ILO concrete pavers @ main entries - 3115 sf	-\$77,875.00			
	92	use asphalt walkways ILO concrete @ main entries - 3115 sf	-\$27,412.00			
	93	use bituminous curb ILO granite @ all remaining locations	-\$58,349.50			
	94	Remove electric vehicle charging stations - Loss of 1 LEED credit	-\$56,000.00			removes equipment, underground conduit still provided
SYSTEMS *	95	use manual flush valves ILO automatic flush valves			-\$9,240.00	84 locations
	96	remove voice lift system from classrooms and use 60w 70v amp mounted on tv on wall, with 4 ceiling speakers - no microphone	-\$163,200.00			96 locations
	97	remove device box with conduit stub above ceiling for Voice Lift system	-\$27,950.00			does not affect amp/speaker scenario above

TOTAL DEDUCT PRIORITY 2		
ACCEPTED	HOLD	DECLINED
\$2,284,488	\$83,400	\$139,640

TOTAL FROM CATEGORIES ABOVE		
ACCEPTED	HOLD	DECLINED
\$6,362,431	\$249,900	\$139,640

TARGET DEDUCT = \$6,268,439

ACCEPTING THE ITEMS IN THIS AND ALL PREVIOUS CATEGORIES PROVIDES A PATH TO BUDGET.

PRIORITY 3: Items may impact function, maintenance, or durability - use this category if any of the items in the lists above are unacceptable

ITEM #	ITEM & DESCRIPTION	ACCEPTED	HOLD	DECLINED	NOTES	
BUILDING	98	use rigid vinyl wall panel ILO tile at bathroom walls		-\$130,000.00		Calculations based on tile scope reductions noted above
	99	use rigid vinyl wall panel ILO tile at corridor @ 3' high		-\$144,313.00		Calculations based on tile @ 3'
	100	remove all remaining exterior sunscreens @ gymnasium - 120 lf vertical, 250 lf horizontal		-\$69,000.00		shades not included in gymnasium - maintenance issue
	101	remove RTU roof screens - additional structural steel required		-\$65,000.00		
	102	remove RTU roof screens - screen louver item		-\$187,000.00		
FOOD SERVICE EQUIPMENT	103	Use regular convection oven ILO combi oven - ground floor		-\$25,000.00		May require the addition of a steamer and increasing the hood length
	104	Use regular convection oven ILO combi oven - third floor		-\$25,000.00		May require the addition of a steamer and increasing the hood length
	105	Use regular cold or hot wells ILO convertible hot/cold wells - ground floor		-\$12,000.00		
	106	Use regular cold or hot wells ILO convertible hot/cold wells - third floor		-\$12,000.00		
	107	Delete ice maker & floor trough - buy ice when needed		-\$10,000.00		
	108	Delete pot and pan washer - wash all pots and pans by hand.		-\$17,000.00		
SYSTEMS	109	remove pendant light fixtures from classrooms and use recessed 2x2 lights		-\$325,792.50		increase quantity by 30%
	110	have Norwood Light provide transformer and all other items typically supplied by utility provider		-\$600,000.00		NOTE increase electrical rates - reduction also estimated, not calculated
	111	remove emergency generator and all circuiting requirements - utilize battery lights (generator, duct banks & pad)		-\$523,400.00		
	112	remove parking security cameras		-\$133,000.00		
	113	remove all exterior building cameras except for ones covering the doors		-\$80,000.00		
	114	Remove building lightning protection		-\$95,000.00		CONFIRM ACCEPTABLE WITH INSURANCE COMPANY

TOTAL DEDUCT PRIORITY 3		
ACCEPTED	HOLD	DECLINE
\$0	\$2,453,506	\$0

POTENTIAL ADDITIONAL ITEMS:

Items reduce square footage or are associated with an item in a previous list

POTENTIAL ADDITIONAL ITEMS						
AUDITORIUM	115	CURRENT: 600 seats, 2 aisles	\$0.00			
	116	550 seats, 4 aisles	-\$19,000.00			reduced seat quantity, room size remains
	117	550 seats, 2 aisles	-\$514,000.00			
	118	500 seats, 4 aisles	-\$533,000.00			
	119	500 seats, 2 aisles	-\$1,028,000.00			
CONCESSIONS	120	reduce thickness of wall insulation	-\$859.00			CAN NOT BE TAKEN IF ADD ALTERNATE ITEM ABOVE IS ACCEPTED (TOTAL = \$15,243)
	121	remove fiber cement and replace with splitface	-\$4,860.00			
	122	remove precast watertable and use splitface	-\$4,380.00			
	123	use ACT ILO painted GWB in bathroom	-\$208.00			
	124	paint concrete floors in Concessions Building ILO polished Concrete (238sf)	-\$2,261.00			
	125	reduce underslab insulation from 100% floor area to 2' at perimeter (reduce from 630 to 200sf)	-\$1,075.00			
	126	PLAM counter at the concessions building ILO stainless steel	-\$1,600.00			

Design Development Submission: OVERVIEW

FURTHER DEVELOPED

Project Specifications

2 VOLUMES (~1,830 pages)

3-part specifications in CSI Divisions defining scope, materials, finishes, products, equipment, and installation requirements including workmanship.

Drawings

2 VOLUMES (~430 sheets)

- Civil
- Landscape
- Architecture
- Food Service
- Structure
- Plumbing
- Fire Protection
- Mechanical
- Electrical
- Technology
- Theater
- Solar

Report

(~500 pages)

- Project Schedule
- Design Narratives
- Code Analysis
- Project Reports
- Cost Estimates

DESIGN DEVELOPMENT COAKLEY MIDDLE SCHOOL AD ARCHITECT, LLC

2. Frames shall be of 12 gauge galvanized steel with integral factory applied aluminum finish and fasteners.

3. Vertical wood studs shall be of tongue and groove configuration, ensure panels are aligned vertically between panels.

4. Horizontal top studs shall be metal studs, provide 1 inch nominal opening clearance, and level against floor when installed. All panels, including lower crown panels must have retractable top and bottom rails.

5. Horizontal bottom rails shall be aluminum, provide up to 2 inches nominal opening clearance, and level against floor when fully extended.

6. Horizontal bottom rails shall be retractable, provide 4 inches nominal opening clearance, and level 3/4" to 1" above floor when fully extended.

7. Increase trim shall be of aluminum.

C. Suspension system

1. For panels to be hung, there shall be a clear wood structural grade member above the panels, DED-75. Track shall be of precision ground steel with anodized aluminum, 1/2" x 1/2" x 1/2" or equivalent. Track shall be connected to the structural member by means of stainless steel DED-75. The track shall be hung from the structural member by means of stainless steel DED-75. The track shall be hung from the structural member by means of stainless steel DED-75. The track shall be hung from the structural member by means of stainless steel DED-75.

D. Framing

1. Aluminum Sill. Factory applied custom fabric finish applied over substrate, with a minimum of 1/8" thickness.

2. Choose Sill. Factory applied custom anodized fabric finish applied over substrate, with a minimum of 1/8" thickness.

3. Custom fabric finish shall be of aluminum, with a minimum of 1/8" thickness.

4. Custom fabric finish shall be of aluminum, with a minimum of 1/8" thickness.

5. Custom fabric finish shall be of aluminum, with a minimum of 1/8" thickness.

E. Operation

1. Manual operation to raise, lower, and store panels.

2. Manual operation to raise, lower, and store panels.

3. Manual operation to raise, lower, and store panels.

FOLDING PANEL PARTITIONS

Design: 02.22.21, 07.20.2022

FOLDING PANEL PARTITIONS

Design: 02.22.21, 07.20.2022

FOLDING PANEL PARTITIONS

Design: 02.22.21, 07.20.2022

FOLDING PANEL PARTITIONS

Design: 02.22.21, 07.20.2022

Architectural drawings including floor plans, elevations, and sections for the Coakley Middle School project. The drawings show various views of the building, including a large section showing the interior structure and a floor plan showing the layout of the school. The drawings are detailed and include various annotations and dimensions.

Project reports including a table of contents, a cost summary table, and a design narrative section. The table of contents lists various sections of the report, including Project Schedule, Design Narratives, Code Analysis, Project Reports, and Cost Estimates. The cost summary table provides a breakdown of the project costs, including New Construction, Demolish Existing Buildings, and Construction Materials. The design narrative section discusses the project's goals and the proposed construction method.

Item	Description	Quantity	Unit	Estimated Cost
1	Demolish Existing Buildings	1	sq ft	187,000
2	Construction Materials	1	sq ft	630
3	Site Work	1	sq ft	187,000
4	Excavation to Start Date (June 2025)	1	sq ft	6,000
5	Design and Pricing Contingency	1	sq ft	2,000
6	General Requirements (Includes Winter Conditions)	1	sq ft	2,000
7	General Conditions	1	sq ft	2,000
8	Bonds	1	sq ft	2,000
9	Insurance - Builders Risk	1	sq ft	2,000
10	Insurance - General Liability	1	sq ft	2,000
11	Permit	1	sq ft	2,000
12	CM Fee	1	sq ft	2,000
13	CM Contingency	1	sq ft	2,000
14	Sub-TOTAL	1	sq ft	187,000
15	TOTAL OF ALL CONSTRUCTION	1	sq ft	187,000

3 DESIGNER DELIVERABLES

Design Narrative: Structural

Designed in accordance with the 9th Edition of The Massachusetts State Building Code and incorporating IBC 2015 with Massachusetts amendments.

The proposed scheme will consist of construction of a new, 4-story structure on the existing school site.

Substructure

Foundations

Based on the recommendations from the Geotechnical Engineer, the columns of the proposed structure would bear on reinforced concrete spread footings and the perimeter foundation walls would bear on continuous reinforced concrete strip footings extending at least 4 ft - 0 in. below grade. With the recommended bearing capacity of the soil of 3.5 ksf, a typical interior footing would be 10 ft - 0 in. x 10 ft - 0 in. x 24 in. deep and the typical exterior footings would be 9 ft - 0 in. x 9 ft - 0 in. x 24 in. deep in the four story areas. Typical interior footing would be 9 ft - 0 in. x 9 ft - 0 in. x 24 in. deep and the typical exterior footings would be 8 ft - 0 in. x 8 ft - 0 in. x 24 in. deep in the three story areas. In the single story areas, typical interior footings would be 7 ft - 0 in. x 7 ft - 0 in. x 24 in. deep and typical exterior footings would be 6 ft - 0 in. x 6 ft - 0 in. x 24 in. deep. Typical interior and exterior footings at the Auditorium would be 9 ft - 0 in. x 9 ft - 0 in. x 24 in. deep. Typical interior and exterior footings at the Gymnasium would be 8 ft - 0 in. x 8 ft - 0 in. x 24 in. deep. The exterior foundation walls would be 14 to 16 in. thick, reinforced cast-in-place concrete walls 24 to 36 in. wide continuous reinforced concrete strip footings around the perimeter of the building extending a minimum of 4 ft - 0 in. below finished grade. Perimeter foundations drains are required around the entire perimeter of the building as per recommendations from the Geotechnical Engineer. Underdrain drains may be required based on findings from the next phase of Geotechnical Investigations.



Next Middle School Building Committee meeting: August 15

