

November 15, 2017

RE: Base Repair / Base Reno comparison Mattacheese School – Perkins Eastman / KBA Architects.

Line 11 below shows the TPC for the KBA work scope if escalated to 2020 and with the appropriate soft costs, professional fees, contingencies and other factors accounted for to produce a true comparative number between the 2 estimated scopes of work. The (3) pages following this memo review the items in the KBA estimate in further detail highlighting the following –

- Scope with significant variation in pricing due to unit / quantity or both
- Scope PE feels should be included in the base cost and is not

Perkins Eastman  
Architects DPC

Factoring these scope items in would add \$12,166,538 to the KBA base scope arriving at a TPC of \$46,186,194 which is \$3,454,358 more than the PE Base Repair cost of \$42,731,836.

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#### GENERAL NOTES –

- 1) KBA total estimate for construction is \$15,345,122 set in 2014 dollars, using historic escalation factors to the mid-point of construction to 2020 – the escalated KBA would be \$21,173,521.
- 2) It appears that KBA assumes the project(s) will be bid chapter 149 (DBB), as it is all occupied renovation PE assumes it will be chapter 149A (CMAR)
- 3) Below the line costs KBA carries
  - a. Overhead and profit at 10%
  - b. General Conditions at 10%
- 4) Below the line costs PE Carries
  - a. General Conditions at 12%
  - b. CM Fee at 3%
  - c. Phasing and Logistics (building is occupied with students, staff and visitors during construction process) at 7%
  - d. CM Contingency at 3.5%
  - e. Bond at 1%
  - f. Insurance at 1.5%
- 5) Soft Costs carried by KBA
  - a. Architectural Fee at 10%
  - b. Administrative fee at .5%, it is unclear what this includes
- 6) Soft Costs accounted for and carried by PE

Boston  
Charlotte  
Chicago  
Dallas  
Dubai  
Guayaquil  
Los Angeles  
Mumbai  
New York  
Pittsburgh  
San Francisco  
Shanghai  
Stamford  
Toronto  
Washington DC

A/E Feasibility Study

A/E Full Services[1]

Site Survey

Geotechnical Investigation & Design (structural & environmental)

Site Environmental Remediation Design & Bid Documents

Site Environmental Remediation Construction Monitoring

Hazardous Materials Investigation, Design & Bid Documents

Hazardous Materials and Air Quality Construction

Monitoring

Permit Submissions & Hearings

Furniture, Equip, & Ed Tech Design & Procure

Progress Printing & Plotting

Bid Set Printing

**Other Project Expenses**

Project Manager[2]

Clerk of Works

Construction Testing

Commissioning

Building Permits

Utility Company Service Charges

Moving, storage & relocation expenses

Bond Costs

Insurance, Legal & Accounting Expenses

Owners Contingency

- 7) The KBA report does not include design contingency – as the project is not currently “designed” it is customary to include a contingency for items that are as yet to be drawn – at feasibility level it is recommended to carry 15% - this would increase the KBA estimate to \$24,349,549.
- 8) The KBA report does not include a bidding contingency – it is industry standard to carry a contingency for potential fluctuations that may occur on bid day – we carry a 3% contingency – this would increase the KBA estimate to \$25,080,036.
- 9) The KBA report does not carry a construction contingency – for a renovation / repair project built in the early 1970’s we would suggest a minimum of 7.5%. This would increase the KBA estimate to \$26,961,038.
- 10) Phased renovations require swing space – although it is possible to “phase” the construction within the existing building it is potentially faster and more efficient to construct a number of temporary classrooms – for this project we

suggest a wing by wing approach – this would require construction of 8 modular classrooms at a cost of approximately \$942,000

- 11) If you take the revised cost of \$26,961,038 and add the FFE, soft costs and professional fees of approximately \$6,116,618 and the modular cost the TPC is \$34,019,656.
- 12) The back-up sheet attached details the major cost differences

As requested the excerpt from the Architectural Access Board Regulations

521 CMR section 3.3.1

- If the work being performed amounts to less than 30% of the full and fair cash value of the building and
  - a. If the work costs less than \$100,000- then only the work being performed must comply
  - or
  - b. If the work costs more than \$100,000 but less the 30% - then the work being done and in addition an accessible entrance, toilet room, telephone and drinking fountain shall also be provided.

Exception: General Maintenance and on-going upkeep do not trigger upgrades unless the project cost exceeds \$500,000.

Exception: Whether performed alone or in combination with each other, the following type of alterations are not subject to 521 CMR 3.3.1 unless the cost exceeds \$500,000.

- a. Curb cuts
- b. Alteration work which is related solely to Electrical, Mechanical or Plumbing systems, hazardous materials abatement or retrofit of sprinklers.
- c. Roof repair or replacement, window repair or replacement, repointing masonry repair work.
- d. Septic System Repairs.

ADA / AAB Scope

- All bathrooms are non-compliant – rooms and fixture locations are not accessible, rooms must be enlarged to be brought into compliance with current code, masonry walls need to be removed and re-built and entire areas reconfigured. KBA report carries 108K, the cost for full compliance is roughly 40K per location.

- Access to the locker rooms or the bleachers – (2) lifts will be required to access the locker rooms at either side of the Gym.
- Access to the stage – Current AAB requires that access to a platform or stage be provided within the Auditorium, a lift would be required.
- Accessible seats at bleachers and auditorium – accessible areas for seating to be provided at the assembly areas
- The KBA report notes 13 locations for doors to be widened – there are 50 locations in the current building where the entry to a room or space is not in compliance
- The KBA report notes the ramp to gym is too steep and a lift is to be provided, we suggest re-pouring the ramp to comply and providing new handrails.
- Install accessible drinking fountains, both reports have this line item
- Replace one elevator and install a new elevator, PE carried the price of replacement of the existing elevator – unsure of why a second would be required.
- Make classroom sinks accessible – both reports have this line item
- New accessible hardware – the doors are not machined to accept hardware replacement – retrofits are possible but PE recommends and carried \$173,065 – KBA has carried \$5000
- New signage – KBA does not carry, it is required
- Access to control room – the current control room is a wood platform built into a former coat closet – the platform is not accessible.
- Kitchen servery, library circulation desk, main admin (breakroom, desk, mailboxes), science lab casework and other misc. items are not accessible – Not in KBA estimate – in PE estimate

## COMPARISON - KBA 2013 CAPITAL UPDATE AND PERKINS EASTMAN 2017 BASE REPAIR (MATTACHEESE)

NOTES:

- 1) The KBA report outlines the thresholds for AAB compliance on page 3 of the report - it states that the threshold projects of more than 30% of the FMV assessed value of the project over a 36 month period, excluding window replacement, roofing and masonry repairs:  
 2) Yellow Highlighted are not included in total as they are included in line 10 of memo

SECTION	SCOPE	KBA COST	PE COST	DELTA	COMMENTS
SITWORK	Misc Site repairs, sidewalks, parking areas, additional curb cuts etc	\$457,300	\$1,031,151	-\$573,851	The base cost for the sitework in the PE estimate is \$493,895, roughly equal to the KBA report, however, the KBA report does not address replacement of the Septic System (\$353,000) or design contingency
HAZARDOUS MATERIALS - BUILDING	Removal of hazardous materials, including asbestos tile, insulation and fittings as well as addressing potential PCB contamination	\$0	\$1,549,200	-\$1,549,200	Not addressed or included in KBA report
HAZARDOUS MATERIALS - SITE	Removal of contaminated soils, abandoned or non-compliant underground tanks found during the Phase 1 site environmental study	\$0	\$67,500	-\$67,500	Not addressed or included in KBA report
DEMOLITION	Misc work required to complete the scopes of work noted within the report, for example replacement of toilet fixtures and drinking fountains requires the disconnection, removal and carting away of the items -	\$0	\$764,404	-\$764,404	Not addressed or included in KBA report
EXTERIOR ENCLOSURE	See below				
	1) Replace Kalwall skylights at canopy	\$261,000	\$205,800	\$55,200	Difference in unit costs -
	2) Repair spalling concrete at roof edges	\$194,800	\$49,525	\$145,275	PE did not carry sealing the exposed concrete only repairs - it is our opinion that sealing of these assemblies is not necessary
	3) Repair Ceramic Tile at Auditorium	\$3,000	\$7,500	-\$4,500	
	4) Concrete Stair repair and repaint	\$15,000	\$20,000	-\$5,000	KBA report does not include replacement of railings/guards or stair nosing's
	5) Caulking	\$5,000	\$21,276	-\$16,276	
WINDOWS AND DOORS		\$1,928,500	\$1,352,834	\$575,666	
ROOFING	Replacement of the PVC roofing system	\$705,500	\$1,262,384	-\$556,884	The PE estimate includes re-roofing the entire building as well as demounting and re-mounting the solar array, the KBA estimate of work excludes the gym and any solar array work - the roof the gym was installed about 2008 - by 2018 it will be 10 years old into a 15 year warranty period, it was our opinion that leaving a roof at the end of the project that could only have 1 to 3 years left in its base warranty was not ideal or preferred.
INTERIOR FINISHES	See below				

	1) Flooring replacement - VCT and Carpet	\$7,000	\$467,995	-\$460,995	The KBA report does not carry replacement of any flooring or base - the VCT was replaced around the year 2000, the accepted life cycle for VCT is 15 years, at the time of construction the VCT will be 18 to 19 years old
	2) Painting	\$0	\$146,548	-\$146,548	Painting is being treated in the KBA report as a maintenance item - PE has carried costs for repainting the building interior
	3) Refinish wood floor	\$33,750	\$36,736	-\$2,986	
	4) Auditorium Seating	\$84,000	\$257,250	-\$173,250	It is generally accepted that good quality Auditorium seats cost more then \$120 per seat
	5) New rigging for auditorium	\$0	\$90,000	-\$90,000	Not Included in KBA report
	6) Replace Casework - most in non-accessible and perimeter casework is supplied by the Unit Vent manufacturer when changes are made to mechanical the casework will be effected	\$0	\$211,650	-\$211,650	Not Included in KBA report
	7) ACT ceiling	\$24,750	\$375,295	-\$350,545	KBA report only addresses the existing current ACT in the facility and not the additional ACT that will be required due to changes in the mechanical systems
	8) Replacement of the following, Lockers, Toilet Partitions, FE cabinets, Fume Hoods, Appliances, Marker and Tack, display cases	\$109,000	\$433,202	-\$324,202	KBA report carries cost for future locker replacement only
	9) Interior doors and hardware	\$10,000	\$187,065	-\$177,065	KBA report only carries a minimal amount for repairs to doors and frames and a very small amount for hardware, PE included replacemnt and upgrade of all doors and hardware throughout for security and continuity
	10) Accessibility	\$794,800			KBA has noted several items - in our opinion \$5000 for an accessible hardware upgrade is not a realistic value, 2 elevators are not required, no mention is made of the significant rework of the locker rooms or the gang bathrooms, whiteboard upgrades are not accessibility issues, the access to the stage is not mentioned, accessible seating at the auditorium and the issues at the bleachers are not mentioned, entrances to the classrooms are not mentioned, accessible egress not mentioned
	11) Code issues - stairs, nosing's, handrails, guardrails	\$80,000	\$121,720	-\$41,720	

EQUIPMENT	Kitchen equipment and serving lines	\$0	\$568,125	-\$568,125	KBA report does not address Kitchen Equipment
FIRE PROTECTION	Fully sprinkler building	\$705,000	\$579,400	\$125,600	Agree this must be done per MGL section 26G
PLUMBING	Replace all fixtures and piping	\$144,000	\$880,131	-\$736,131	KBA report leaves 50 year old distribution in place
HVAC	replace all systems and controls	\$5,197,575	\$3,933,766	\$1,263,809	Agree this must be done
ELECTRICAL	replace all systems and infrastructure - add tech/data and security	\$556,125	\$4,628,425	-\$4,072,300	KBA report leaves 50 year old distribution in place
GENERAL CONDITIONS		\$1,147,685	\$2,462,797	-\$1,315,112	KBA carries 10% - PMA and PE suggest 12% for GC's
PHASING	Cost incurred to work in an occupied building, includes temp walls, fire watches, shut downs, overtime etc.	\$0	\$1,610,344	-\$1,610,344	KBA carries no phasing costs or premiums
BOND & INSURANCE		\$0	\$513,500	-\$513,500	KBA carries no bonds or insurance costs
OPM / Clerk	Professional fees for Owners Project Manager and on -site daily site supervision during construction	\$0	\$1,300,000	-\$1,300,000	KBA carries no OPM costs or Clerk of the Works as required by MGL
SOFT COSTS	There are a number of "soft costs" associated with a construction project such as, legal, bonding agents, insurance (builders risk), printing, air monitoring, construction testing, permits, moving, storage, utility service back charges - etc	\$0	\$597,955	-\$597,955	KBA carries no soft costs in their estimates
FFE	<b>Furniture</b> (classrooms, offices, library etc - all non-fixed furniture), <b>Fixtures</b> (Appliances), <b>Equipment</b> (Science lab accessories, gym equipment, phones, projectors, computers etc) & Professional Fees for design and procurement	\$0	\$1,194,778	-\$1,194,778	KBA does not address furniture or equipment

-\$12,166,538 TOTAL

**Dennis Yarmouth Regional  
Mattacheese Middle School**

11/8/17

FS Base Repair Estimate

SF 122,207  
PSF \$349.67

<b>A.</b>	<b>CONSTRUCTION</b>		<b>TOTAL</b>
	Foundations		\$30,947
	Superstructure		\$35,782
	Exterior Closure		\$449,584
	Windows & Doors		\$1,651,209
	Roofing		\$1,262,384
	Interior Construction		\$667,146
	Stairs		\$169,124
	Millwork		\$970,879
	Interior Finishes		\$1,243,740
	Specialities		\$200,000
	Furnishings & Equipment		\$902,006
	Conveying Systems		\$193,200
	Fire Protection		\$666,310
	Plumbing		\$1,012,151
	HVAC		\$3,933,766
	Electrical		\$4,628,425
	<b>SUBTOTAL</b>		<b>\$18,016,652</b>
<b>B.</b>	<b>SITE IMPROVEMENTS</b>		
	Demolition		\$764,404
	Hazardous Materials Remediation		\$1,552,870
	Septic		\$451,587
	Site Work		\$916,351
	Site Improvements		\$115,000
<b>C.</b>	<b>TOTAL TRADE COST</b>		<b>\$21,816,864</b>
	General Conditions	12.0%	\$2,618,024
	CM Fee	3.0%	\$733,047
	Phasing	7.0%	\$1,710,442
	CM Contingency	3.5%	\$763,590
	Bond	1.0%	\$218,169
	Insurance	1.5%	\$327,253
<b>D.</b>	<b>SUBTOTAL CONSTRUCTION MANAGERS COST</b>		<b>\$28,187,388</b>
	Escalation to 3/20 (midpoint)	10.8%	\$3,044,238
<b>E.</b>	<b>TOTAL CONSTRUCTION MANAGERS COST</b>		<b>\$31,231,626</b>
	Bidding Contingency	3.0%	\$936,949
<b>F.</b>	<b>TOTAL ESTIMATED GMP</b>		<b>\$32,168,575</b>
	Construction Contingency	7.5%	\$2,412,643
<b>G.</b>	<b>TOTAL ESTIMATED CONSTRUCTION COST</b>		<b>\$34,581,218</b>
	Owners Soft Costs		\$6,116,618
	Relocatable Classrooms (8)		\$942,000
	Fixtures, Furniture and Equipment	455 Students	\$1,092,000
<b>J.</b>	<b>TOTAL PROJECT COST</b>		<b>\$42,731,836</b>

NOTE DESIGN AND PRICING CONTINGENCY INCLUDED AT 15%



**INDIRECT EXPENSES****A/E Services**

A/E Feasibility Study		\$530,000
A/E Full Services[1]	ECC X 9.0%	\$2,685,998
Site Survey		incl
Geotechnical Investigation & Design (structural & environmental)		\$20,000
Site Environmental Remediation Design & Bid Documents		\$20,000
Site Environmental Remediation Construction Monitoring		\$20,000
Hazardous Materials Investigation, Design & Bid Documents		\$140,800
Hazardous Materials and Air Quality Construction Monitoring		w/above
Permit Submissions & Hearings		\$10,000
Furniture, Equip, & Ed	ECC X 8.0%	\$102,778
Progress Printing & Plotting		\$20,000
Bid Set Printing		\$20,000

Subtotal A/E services  \$3,569,575

**Other Project Expenses**

Project Manager[2]	ECC X 3.5%	\$1,044,555
Clerk of Works	\$10,000 X 26 months	\$260,000
Construction Testing		\$100,000
Commissioning		\$0
Building Permits		\$107,155
Utility Company Service Charges		\$45,000
Moving, storage & relocation expenses		\$50,000
Bond Costs		\$20,000
Insurance, Legal & Accounting Expenses		\$25,000
Owners Contingency	3%	\$895,333

Subtotal Other Expenses  \$2,547,042

**TOTAL INDIRECT EXPENSES**  **\$6,116,618**

[1] Includes architectural, interior, food service, lighting, acoustical, and landscape design; structural, mechanical, electrical, plumbing, fire protection, civil and traffic engineering; and cost estimating.

[2] Pre-construction phase includes coordinating Owner's activities, inventory of existing food service equipment, FFE & ed technology to be reused and cost estimates. Construction phase includes coordinating Owner's activities, supervise clerk of works, coordinate Contractors' activities, coordinate food service, FFE and Ed Tech installations, and coordinate Owner occupancy.



## **Feasibility Study Estimate**

# **Mattacheese Middle School Renovations**

Yarmouth, MA

### **PM&C LLC**

20 Downer Avenue, Suite 1c  
Hingham, MA 02043

(T) 781-740-8007

(F) 781-740-1012

Prepared for:

**Perkins Eastman**

August 21, 2017



**Mattacheese Middle School**  
Renovations  
Yarmouth, MA

21-Aug-17

**Feasibility Study Estimate**

**MAIN CONSTRUCTION COST SUMMARY**

	<b>Gross Floor Area</b>	<b>\$/sf</b>	<b>Estimated Construction Cost</b>
<b>RENOVATIONS</b>			
RENOVATIONS TO EXISTING MIDDLE SCHOOL	115,880	\$130.74	\$15,150,282
GENERAL REQUIREMENTS			\$606,011
REMOVE HAZARDOUS MATERIALS			TBD
SITWORK			\$493,895
SUB-TOTAL	115,880	\$140.23	\$16,250,188
ESCALATION TO START DATE MARCH 2019 - (assumed 4% PA)	6.33%		\$1,028,637
DESIGN AND PRICING CONTINGENCY	15%		\$2,437,528
SUB-TOTAL	115,880	\$170.14	\$19,716,353
GENERAL CONDITIONS	12.00%		\$2,365,962
PHASING LOGISTICS	5.00%		\$985,818
BONDS	1.15%		\$226,738
INSURANCE	2.00%		\$394,327
PERMIT			Waived
CM FEE	5.0%		\$1,184,460
CM CONTINGENCY	3.5%		\$690,072
<b>TOTAL OF ALL CONSTRUCTION</b>	115,880	\$220.61	<b>\$25,563,730</b>



## **Mattacheese Middle School**

Renovations

Yarmouth, MA

21-Aug-17

### **Feasibility Study Estimate**

This cost estimate was produced from Feasibility Design drawings and narratives, received August 02, 2017, prepared by Perkins and Eastman and their design team.

This estimate includes all direct construction costs, Construction Manager's overhead and profit and design contingency. Cost escalation assumes start dates indicated.

Bidding conditions are expected to be public bidding under 149a of the Massachusetts General Laws to pre-qualified construction managers, and pre-qualified sub-contractors, open specifications for materials and manufacturers.

The estimate is based on prevailing wage rates for construction in this market and represents a reasonable opinion of cost. It is not a prediction of the successful bid from a contractor as bids will vary due to fluctuating market conditions, errors and omissions, proprietary specifications, lack or surplus of bidders, perception of risk, etc. Consequently the estimate is expected to fall within the range of bids from a number of competitive contractors or subcontractors, however we do not warrant that bids or negotiated prices will not vary from the final construction cost estimate.

### **ITEMS NOT CONSIDERED IN THIS ESTIMATE**

Items not included in this estimate are:

- All professional fees and insurance
- Building Permit costs
- Land acquisition, feasibility, and financing costs
- All Furnishings, Fixtures and Equipment
- Items identified in the design as Not In Contract (NIC)
- Items identified in the design as by others
- Owner supplied and/or installed items (e.g. draperies, furniture and equipment)
- Rock excavation; special foundations (unless indicated by design engineers)
- Utility company back charges, including work required off-site
- Work to City streets and sidewalks, (except as noted in this estimate)



**CONSTRUCTION COST SUMMARY**

<i>BUILDING SYSTEM</i>		SubTotal	TOTAL	\$/SF	%
<b>RENOVATION</b>					
<b>A10 FOUNDATIONS</b>					
A1030	Lowest Floor Construction	\$26,910	<b>\$26,910</b>	\$0.23	0.2%
<b>B10 SUPERSTRUCTURE</b>					
B1010	Upper Floor Construction	\$26,435	<b>\$26,435</b>		
<b>B20 EXTERIOR CLOSURE</b>					
B2010	Exterior Walls	\$390,943			
B2020	Windows	\$638,373			
B2030	Exterior Doors	\$83,000	<b>\$1,112,316</b>	\$9.60	7.3%
<b>B30 ROOFING</b>					
B3010	Roof Coverings	\$1,055,225			
B3020	Roof Openings	\$53,500	<b>\$1,108,725</b>	\$9.57	7.3%
<b>C10 INTERIOR CONSTRUCTION</b>					
C1010	Partitions	\$311,767			
C1020	Interior Doors	\$187,065			
C1030	Specialties/Millwork	\$764,367	<b>\$1,263,199</b>	\$10.90	8.3%
<b>C20 STAIRCASES</b>					
C2010	Stair Construction	\$126,200			
C2020	Stair Finishes	\$20,864	<b>\$147,064</b>	\$1.27	1.0%
<b>C30 INTERIOR FINISHES</b>					
C3010	Wall Finishes	\$111,684			
C3020	Floor Finishes	\$574,165			
C3030	Ceiling Finishes	\$375,295	<b>\$1,061,144</b>	\$9.16	7.0%
<b>D10 CONVEYING SYSTEMS</b>					
D1010	Elevator	\$168,000	<b>\$168,000</b>	\$1.45	1.1%
<b>D20 PLUMBING</b>					
D20	Plumbing	\$880,131	<b>\$880,131</b>	\$7.60	5.8%
<b>D30 HVAC</b>					
D30	HVAC	\$3,420,666	<b>\$3,420,666</b>	\$29.52	22.6%
<b>D40 FIRE PROTECTION</b>					
D40	Fire Protection	\$579,400	<b>\$579,400</b>	\$5.00	3.8%
<b>D50 ELECTRICAL</b>					
D5010	Service & Distribution	\$1,062,960			
D5020	Lighting & Power	\$1,326,504			



**CONSTRUCTION COST SUMMARY**

<i>BUILDING SYSTEM</i>		SubTotal	TOTAL	\$/SF	%
<b>RENOVATION</b>					
D5030	Communication & Security Systems	\$1,222,534			
D5040	Other Electrical Systems	\$412,719	<b>\$4,024,717</b>	\$34.73	26.6%
<b>E10 EQUIPMENT</b>					
E10	Equipment	\$216,228	<b>\$216,228</b>	\$1.87	1.4%
<b>E20 FURNISHINGS</b>					
E2010	Fixed Furnishings	\$468,900			
E2020	Movable Furnishings	NIC	<b>\$468,900</b>	\$4.05	3.1%
<b>F20 HAZMAT REMOVALS</b>					
F2010	Building Elements Demolition	\$646,447			
F2020	Hazardous Components Abatement	\$0	<b>\$646,447</b>	\$5.58	4.3%
<b>TOTAL DIRECT COST (Trade Costs)</b>			<b>\$15,150,282</b>	\$130.74	100.0%



Feasibility Study Estimate

GFA 115,880

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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RENOVATION

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**GROSS FLOOR AREA CALCULATION**

**Renovated spaces**

First floor unit 100				10,455			
Second floor unit 100				9,564			
First floor unit 200				4,752			
Second floor unit 200				4,632			
First floor unit 300				9,863			
Second floor 300				9,815			
Lower level unit 500				3,428			
First floor unit 500				34,433			
Main Floor unit 500				28,938			

<b>TOTAL GROSS FLOOR AREA (GFA)</b>					<b>115,880</b>	<b>sf</b>	
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**A10 FOUNDATIONS**

**A1030 LOWEST FLOOR CONSTRUCTION**

**033000 CONCRETE**

Allowance to create depression in slab for wheelchair lifts	75	sf	80.00	6,000		
General slab patching	10,455	sf	2.00	20,910		
<b>SUBTOTAL</b>						<b>26,910</b>

<b>TOTAL - FOUNDATIONS</b>							<b>\$26,910</b>
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**A20 BASEMENT CONSTRUCTION**

**A2010 BASEMENT EXCAVATION**

No work in this section  
SUBTOTAL

**A2020 BASEMENT WALLS**

No work in this section  
SUBTOTAL

<b>TOTAL - BASEMENT CONSTRUCTION</b>							-
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**B10 SUPERSTRUCTURE**

**B1010 FLOOR CONSTRUCTION**

**033000 CONCRETE**

*Flat area at rear of Auditorium*

Formwork	80	sf	16.00	1,280		
WWF reinforcement	132	sf	1.15	152		
Concrete Fill to metal deck; Normal Weight	3	cy	137.00	411		
Place and finish concrete	115	sf	15.00	1,725		
Rebar to decks	35	lbs	1.32	46		



Feasibility Study Estimate

GFA

115,880

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**RENOVATION**

53	CIP curb at edge of flat area	40	lf	80.00	3,200		
54	Concrete on Metal Deck at chorus room						
55	WWF reinforcement	467	sf	1.15	537		
56	Concrete Fill to metal deck; Normal Weight	9	cy	137.00	1,233		
57	Place and finish concrete	406	sf	15.00	6,090		
58	Rebar to decks	122	lbs	1.32	161		
59	<u>Miscellaneous</u>						
60	Fill floor after removal of curtain track in auditorium	90	lf	25.00	2,250		
61							
62	061000 ROUGH CARPENTRY						
63	Infill flooring at removed stairs at gym and new lift at auditorium	170	sf	55.00	9,350		
64	SUBTOTAL					26,435	

<b>TOTAL - SUPERSTRUCTURE</b>						<b>\$26,435</b>
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**B20 EXTERIOR CLOSURE**

**B2010 EXTERIOR WALLS**

72	042000 MASONRY						
73							
74	Unit 100						
75	Clean brick at various locations	1	ls	3,000.00	3,000		
76	Repair spalled concrete, 12"x12"	1	ea	250.00	250		
77	Repair concrete panels	2	loc	1,000.00	2,000		
78	Spall A, B & C repair, approx. 25lf per loc	3	loc	1,500.00	4,500		
79	Unit 200						
80	Clean brick (30 sf)	1	ls	500.00	500		
81	Unit 300						
82	Repair spalled concrete along fascia (6 loc)	125	sf	140.00	17,500		
83	Repair spalled concrete , typical (2 loc)	25	sf	120.00	3,000		
84	Unit 400						
85	Clean precast sills at all windows	250	lf	10.00	2,500		
86	Remove clips and bolts from masonry, repoint	3	loc	600.00	1,800		
87	Repair spalling at underside of stair landing @ Elev 12C	1	ls	1,000.00	1,000		
88	Repair spalled concrete along fascia (2 loc)	50	sf	140.00	7,000		
89	Repair concrete panel above storefront	10	sf	120.00	1,200		
90	Repair spalled concrete at Loading dock	1	ls	5,000.00	5,000		
91	Unit 500						
92	Cut hole for relocated grille	30	lf	20.00	600		
93	Repair spalled concrete; approx. 2x2 per loc	7	ea	600.00	4,200		
94	Patch/replace damaged or missing mosaic tile	100	sf	75.00	7,500		
95	Patch brick	60	sf	100.00	6,000		
96	Replace bell	1	ea			Electrical	
97	Replace drinking fountain	1	ea			Plumbing	
98	Reseal all exposed concrete	750	sf	6.50	4,875		
99	Clean concrete and brick	180	sf	10.00	1,800		
100	Repair concrete walkway at elevation A	1	ls	900.00	900		





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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>RENOVATION</b>							
101	Staging	1	ls	10,000.00	10,000		
102							
103	052000 MISC. METALS						
104	Unit 200						
105	Remove and replace stair rails	50	lf	250.00	12,500		
106	Unit 400						
107	Remove and replace lintel at louver under stair	6	lf	150.00	900		
108	Remove and replace lintel at Elevation 12C	8	lf	280.00	2,240		
109	Remove and replace stair rails; Elevation 12C	50	lf	250.00	12,500		
110							
111	070001 WATERPROOFING, DAMPPROOFING AND CAULKING						
112	Unit 300						
113	Strip and replace sealants at all control joints; allowance	573	lf	12.00	6,876		
114	Unit 500						
115	Strip and replace sealants at all control joints; allowance	1,200	lf	12.00	14,400		
116							
117	076400 CLADDING						
118	Unit 300						
119	Metal panel infill at existing windows	60	sf	100.00	6,000		
120	Unit 500						
121	Remove and replace Kalwall wall panels	2,940	sf	70.00	205,800		
122	Allowance to repair tectum panel at downspout	15	loc	500.00	7,500		
123							
124	090007 PAINTING						
125	Unit 200						
126	Sandblast exterior stair at Unit 200, repaint and replace nosing's, 48" wide	1	flt	7,500.00	7,500		
127	Scrape, prep and paint exposed steel beam and tees at soffit	190	lf	15.00	2,850		
128	Unit 400						
129	Prep and paint railings at Loading dock	40	lf	40.00	1,600		
130	Scrape, paint and stain exterior stair at Elevation 12C	1	flt	5,000.00	5,000		
131	Scrape, paint and paint exposed MEP piping	78	lf	9.00	702		
132	Unit 500						
133	Scrape, prep and paint steel lintels	380	lf	15.00	5,700		
134	Scrape, prep and paint exposed steel beam and tees at soffit	550	lf	25.00	13,750		
135	SUBTOTAL					390,943	
136							
137	<b>B2020 WINDOWS</b>						
138							
139	061000 ROUGH CARPENTRY						
140	Allowance for wood blocking at openings (Unit 300)	2,755	sf	8.00	22,040		
141	Allowance for wood blocking at openings (Unit 500)	2,249	sf	8.00	17,992		
142							
143	070001 WATERPROOFING, DAMPPROOFING AND CAULKING						
144	Backer rod & double sealant at Unit 300	2,755	sf	9.00	24,795		



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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>RENOVATION</b>							
145	Backer rod & double sealant at Unit 500	2,249	sf	9.00	20,241		
146							
147	080001 METAL WINDOWS						
148	Remove and replace all steel hopper storefront/ window assemblies with low profile 2 3/4" thermally broken storefront Series 960 (EFCO) @ Unit 300	2,755	sf	100.00	275,500		
149	Remove and replace all hollow metal assemblies with 4 1/2" thermally broken storefront @ Unit 500	2,249	sf	95.00	213,655		
150							
151	089000 LOUVERS						
152	Unit 100						
153	Remove and replace vent at UV & F.U. with new louvers; 4'x18"	12	loc	600.00	7,200		
154	Remove and replace vent at UV & F.U. with new louvers; 2' x 18"	22	loc	300.00	6,600		
155	Unit 300						
156	Remove and replace wall pack; 18"x18"	20	loc	350.00	7,000		
157	Remove and replace vent at UV & F.U. with new louvers; 4'x18"	15	loc	600.00	9,000		
158	Remove and replace exhaust vent	15	ea	250.00	3,750		
159	Remove and replace 14"x14" vent	1	ea	250.00	250		
160	Unit 400						
161	Remove and replace wall pack; 18"x18"	4	loc	350.00	1,400		
162	Remove and replace vent	18	ea	250.00	4,500		
163	Remove and replace vent/louwer at UV & F.U. with new louvers; 4'x18"	19	loc	600.00	11,400		
164	New grille/ louver (2 loc)	40	sf	75.00	3,000		
165	Remove and replace hood vent	1	loc	200.00	200		
166	Unit 500						
167	Remove and replace wall pack; 18"x18"	9	loc	350.00	3,150		
168	Remove and replace vent	5	loc	500.00	2,500		
169	Remove and replace grille/ louver	20	sf	75.00	1,500		
170	Replace galvanized duct to roof w/ ss duct	25	lf	100.00	2,500		
171	Install relocated grille in new ope	1	ls	200.00	200		
172							
173	101400 SIGNAGE						
174	No items in this section						
175	SUBTOTAL					638,373	
176							
177	<b>B2030 EXTERIOR DOORS</b>						
178							
179	061000 ROUGH CARPENTRY						
180	Wood blocking at HM door @ Unit 500	40	lf	11.00	440		
181							
182	079200 JOINT SEALANTS						
183	Backer rod & double sealant HM doors @ Unit 500	40	lf	9.00	360		
184							
185	081110 HOLLOW METAL						
186	Unit 300						
187	Glazed entrance doors including hardware at replaced storefront; double	1	pr	8,500.00	8,500		
188	Unit 500						



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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST	
<b>RENOVATION</b>								
189	Glazed entrance door, frame and hardware; single	1	ea	4,900.00	4,900			
190	Unit 500							
191	Frames, single	2	ea	350.00	700			
192	Flush HM door and frame, single leaf	2	leaf	500.00	1,000			
193	Glazed hollow metal entrance doors including hardware at replaced storefront; single	22	ea	2,900.00	63,800			
194								
195	087100 DOOR HARDWARE							
196	Hardware @ Unit 500 HM doors	2	leaf	1,200.00	2,400			
197								
198	090007 PAINTING							
199	Prep and paint double leaf HM door and frame at Loading dock @ Unit 400	1	pr	500.00	500			
200	Finish doors and frames @ Unit 500	2	ea	200.00	400			
201	SUBTOTAL					83,000		
202								
203	<b>TOTAL - EXTERIOR CLOSURE</b>							<b>\$1,112,316</b>
204								
205								
206	<b>B30 ROOFING</b>							
207								
208	<b>B3010 ROOF COVERINGS</b>							
209								
210	052000 MISC. METALS							
211	Sealants at roof edge Unit 100	300	lf	4.00	1,200			
212	Steel angle bolted to existing structure at roof 500 perimeter, 3'x5"	8,500	lbs	3.50	29,750			
213								
214	070001 WATERPROOFING, DAMPPROOFING AND CAULKING							
215	Sealants at roof 500 edge	850	lf	4.00	3,400			
216								
217	070002 ROOFING AND FLASHING							
218	Unit 200							
219	Sloped roofing							
220	Demo and remove existing membrane roof	6,615	sf	3.00	19,845			
221	Standing seam metal roofing on 6" rigid insulation	6,615	sf	32.00	211,680			
222	Rough blocking allowance	300	lf	15.00	4,500			
223	Miscellaneous Roofing							
224	Roof edge system	300	lf	75.00	22,500			
225	Snow guards allowance	1	ls	15,000.00	15,000			
226	Unit 400							
227	Allowance to patch roof at new sky domes	510	sf	20.00	10,200			
228	Unit 500							
229	Flat Roof							
230	Demo and remove existing membrane roofing, complete	32,000	sf	3.00	96,000			
231	Carefully remove all Solar-array panels, store and reinstall after new roof is installed	1	ls	20,000.00	20,000			
232	PVC roofing system, 60 mil on 1/2" protection board, 6" rigid insulation on vapor barrier	33,600	sf	17.00	571,200			
233	3/4" CDX plywood at fascia	850	sf	5.00	4,250			



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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**RENOVATION**

234	Rough blocking	850	lf	12.00	10,200			
235	Pre-fabricated roof edge and 12" brake metal fascia panel w/ continuous cleat	850	lf	30.00	25,500			
236	Walk pads allowance	1	ls	10,000.00	10,000			
237	SUBTOTAL					1,055,225		
239	<b>B3020 ROOF OPENINGS</b>							
241	<i>086300 ROOF SKYLIGHTS</i>							
242	Cut ope in roof, prep for new sky domes	17	loc	1,200.00	20,400			
243	Cut ope in roof, prep for new smoke hatches	2	loc	1,500.00	3,000			
244	New 2'x2' sky domes at Unit 400 roof including flashings & sealants	17	loc	1,300.00	22,100			
245	New 4' x8' smoke hatch	2	loc	4,000.00	8,000			
246	SUBTOTAL					53,500		
248	<b>TOTAL - ROOFING</b>							<b>\$1,108,725</b>

**C10 INTERIOR CONSTRUCTION**

253	<b>C1010 PARTITIONS</b>						
255	<i>040001 MASONRY</i>						
256	6" CMU at locker rooms	1,878	sf	20.00	37,560		
257	8" CMU	1,649	sf	23.00	37,927		
258	8" CMU 1 hr rated	189	sf	24.00	4,536		
259	Infill 8" CMU at removed BL 4'-6"	126	sf	30.00	3,780		
260	Infill 8" CMU wall	32	sf	30.00	960		
261	12" CMU	221	sf	28.00	6,188		
262	Patch walls after storefront removal	2	ea	150.00	300		
264	<i>050001 MISCELLANEOUS METALS</i>						
265	Seismic clips	55	ea	140.00	7,700		
266	Miscellaneous metals to masonry	2,217	sf	1.50	3,326		
268	<i>061000 ROUGH CARPENTRY</i>						
269	Rough blocking	389	lf	6.00	2,334		
271	<i>070001 WATERPROOFING, DAMPPROOFING AND CAULKING</i>						
272	Sealants & caulking at partitions	389	lf	4.00	1,556		
274	<i>080002 GLASS AND GLAZING</i>						
275	Borrowed lights	2,079	sf	65.00	135,135		
276	Borrowed lights at locker room instructor's office	194	sf	65.00	12,610		
278	<i>092900 GYPSUM BOARD ASSEMBLIES</i>						
279	Demising - 2 layers GWB b/s	1,155	sf	17.00	19,635		
280	Standard	2,730	sf	14.00	38,220		
281	SUBTOTAL					311,767	

**C1020 INTERIOR DOORS**





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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST	
<b>RENOVATION</b>								
334	Tackboard	617	sf	20.00	12,340			
335	Chalk board	166	sf	20.00	3,320			
336								
337	101400 DISPLAY CASES							
338	Display cases, 4'-0" wide	2	ea	2,880.00	5,760			
339								
340	102110 TOILET COMPARTMENTS							
341	<u>Phenolic toilet partitions</u>							
342	ADA	21	ea	1,800.00	37,800			
343	Standard	19	ea	1,400.00	26,600			
344	Urinal screens	7	ea	650.00	4,550			
345	Dressing stalls at girl's locker rooms	30	ea	1,100.00	33,000			
346	Miscellaneous support at toilet partitions	70	loc	500.00	35,000			
347								
348	102800 TOILET ACCESSORIES							
349	Gang bathrooms	15	rms	2,500.00	37,500			
350	Individual bathrooms	14	rms	600.00	8,400			
351								
352	104400 FIRE PROTECTION SPECIALTIES							
353	Fire extinguisher cabinets	4	ea	350.00	1,400			
354								
355	105000 LOCKERS							
356	Kitchen locker room lockers	4	ea	220.00	880			
357	Lockers at corridor, single tier	91	ea	200.00	18,200			
358	Lockers at corridor, double tier	520	ope	180.00	93,600			
359	Locker room lockers 9 tier	1,128	ope	70.00	78,960			
360	Locker room lockers double tier	123	ope	180.00	22,140			
361	SUBTOTAL					764,367		
362								
363	<b>TOTAL - INTERIOR CONSTRUCTION</b>						<b>\$1,263,199</b>	
364								
365								
366	<b>C20 STAIRCASES</b>							
367								
368	<b>C2010 STAIR CONSTRUCTION</b>							
369								
370	033000 CONCRETE							
371	Concrete to stairs	4	flt	1,500.00	6,000			
372								
373	055000 MISCELLANEOUS METALS							
374	Relocate stairs at auditorium due to new lift	16	lfr	280.00	4,480			
375	Egress stairs	4	flt	28,000.00	112,000			
376	New center handrails at corridor to auditorium stairs	6	lf	120.00	720			
377	Replace handrails at access stairs in auditorium	12	lf	120.00	1,440			
378	Replace handrails at corridor to auditorium stairs	13	lf	120.00	1,560			
379	SUBTOTAL					126,200		
380								
381	<b>C2020 STAIR FINISHES</b>							
382								
383	090005 RESILIENT FLOORS							
384	Linoleum tile at stairs - landings	360	sf	14.00	5,040			
385	Stained concrete - treads & risers	489	lft	16.00	7,824			
386								



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**RENOVATION**

387	090007 PAINTING							
388	Paint to egress staircases	4	flt	2,000.00	8,000			
389	SUBTOTAL					20,864		
391	<b>TOTAL - STAIRCASES</b>							<b>\$147,064</b>

**C30 INTERIOR FINISHES**

**C3010 WALL FINISHES**

397	090002 TILE						
398	Full height ceramic tile at bathroom wet walls	1,610	sf	22.00	35,420		
399							
400	090007 PAINTING						
401	Block fill and paint exposed CMU	23,640	sf	2.25	53,190		
402	Clean exposed brick wall	550	sf	5.00	2,750		
403	Paint existing walls	3,330	sf	1.00	3,330		
404	Paint existing wood wall panels	180	sf	3.00	540		
405	Paint to new GWB	7,770	sf	0.80	6,216		
406	Paint to new CMU	8,190	sf	1.25	10,238		
407	SUBTOTAL					111,684	

**C3020 FLOOR FINISHES**

410	033000 CONCRETE						
411	Stained concrete	91	sf	2.50	228		
412							
413	064020 WOOD FLOORING						
414	Refinish wood flooring	3,368	sf	7.00	23,576		
415	Vented base	1,645	lf	8.00	13,160		
416							
417	090002 Tile						
418	Ceramic tile at bathrooms	2,275	sf	23.00	52,325		
419	Clean existing tile flooring at corridor	3,477	sf	3.00	10,431		
420	Tile base	800	lf	20.00	16,000		
421							
422	090005 RESILIENT FLOORS						
423	Linoleum tile	40,774	sf	8.00	326,192		
424	VCT	2,944	sf	5.00	14,720		
425	Raised radial rubber flooring at ramps	540	sf	12.00	6,480		
426	Resilient Base	5,177	lf	2.50	12,943		
427	Patch flooring at new partition locations	110	lf	8.00	880		
428							
429	096000 EPOXY FLOORING						
430	Epoxy flooring at renovated locker rooms/instructor's office and toilet's, allowance	3,060	sf	13.00	39,780		
431							
432	096810 CARPETING						
433	Sheet carpet at media center	2,186	sf	5.00	10,930		
434	Broadloom carpet at Auditorium	8,728	sf	5.33	46,520		
435	SUBTOTAL					574,165	



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**RENOVATION**

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**C3030 CEILING FINISHES**

**090003 ACOUSTICAL TILE**

ACT ceilings; 2' x 2'	24,816	sf	5.00	124,080
ACT ceilings; 2' x 2' moisture resistant at toilets	2,275	sf	6.00	13,650
ACT ceilings; 2' x 2' moisture resistant at locker rooms, allowance	3,060	sf	6.00	18,360
ACT ceilings; 2' x 4' at unit 100 classrooms and corridor	14,501	sf	4.50	65,255

**092900 GYPSUM BOARD ASSEMBLIES**

GWB ceilings at dressing rooms and unit 100 classrooms and corridor	2,812	sf	12.00	33,744
GWB soffit, horizontal	1,155	sf	16.00	18,480
GWB soffit, horizontal 1 hr rated	67	sf	22.00	1,474
GWB soffit, vertical	555	sf	20.00	11,100
Allowance to patch/repair GWB cloud at auditorium as required	3,406	sf	8.00	27,248

**090007 PAINTING**

Paint to GWB ceilings	7,995	sf	1.25	9,994
Paint to exposed steel structure at gym	11,589	sf	3.00	34,767
Paint to exposed ceilings	8,514	sf	1.50	12,771
Paint to exposed tectum at media center	2,186	sf	2.00	4,372

SUBTOTAL

375,295

**TOTAL - INTERIOR FINISHES**

**1,061,144**

**D10 CONVEYING SYSTEMS**

**D1010 ELEVATOR**

**142000 ELEVATOR**

Overhaul elevator finishes, cab controls and mechanics, one stop	1	ea	30,000.00	30,000
Wheelchair lift at gym locker rooms, two stop	2	ea	55,000.00	110,000
Wheelchair lift at Auditorium, one stop	1	ea	28,000.00	28,000

SUBTOTAL

168,000

**TOTAL - CONVEYING SYSTEMS**

**\$168,000**

**D13 SPECIAL CONSTRUCTION**

**D1313 SPECIAL CONSTRUCTION**

No work in this section

SUBTOTAL

**TOTAL - SPECIAL CONSTRUCTION**

**D20 PLUMBING**

**D20 PLUMBING, GENERALLY**





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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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RENOVATION

487	Modify existing / add new fixtures as per marked up plans	120	ea	5,000.00	600,000			
488	Replace roof drains	8	loc	1,800.00	14,400			
489	Modify existing / add new floor drains as per marked up plans	20	ea	2,500.00	50,000			
490	Allowance for misc. plumbing scope	115,880	sf	1.50	173,820			
491	Plumbing sub-contract general conditions / requirements	1	ls	41,911.00	41,911			
492	SUBTOTAL					880,131		
493								
494	<b>TOTAL - PLUMBING</b>							<b>\$880,131</b>
495								
496								
497	<b>D30 HVAC</b>							
498								
499	<b>D30 HVAC, GENERALLY</b>							
500	Disconnect transformer & AC units	1	ls	500.00	500			
501	Replace unit ventilators							
502	Allowance to replace all unit ventilators c/w adjusting pipework as required	49	ea	3,000.00	147,000			
503	Replace existing boilers							
504	Allowance for new condensing boilers	20,000	MBH	25.00	500,000			
505	Allowance for controls to new boilers	1	ls	20,000.00	20,000			
506	Allowance to modify pipework / hook-up new boilers	1	ls	25,000.00	25,000			
507	Replace expansion tanks / air separators							
508	Allowance to replace HHW expansion tank & air separator; incl. modification of pipework as required	1	ls	20,000.00	20,000			
509	Replace back-up and older pumps / provide VFD's on back-ups pumps							
510	Allowance to replace back-up and older pumps. Provide VFD's on back-up pumps. Modify pipework as required; assumed to only impact pump P-6	1	ls	12,500.00	12,500			
511	Replace pneumatic controls with DDC controls							
512	Allowance to replace existing pneumatic controls with DDC controls	115,880	sf	6.00	695,280			
513	Replace terminal units							
514	Allowance to replace terminal units incl. modifying pipework as required	115,880	sf	1.00	115,880			
515	Replace fans							
516	Allowance to replace existing rooftop fans	115,880	sf	0.60	69,528			
517	Replace H&V AHU's to gym, auditorium and corridors							
518	Allowance to replace gym H&V AHU's	1	ls	70,000.00	70,000			
519	Allowance to replace auditorium AHU's	1	ls	100,000.00	100,000			
520	Allowance to replace corridor AHU's	1	ls	50,000.00	50,000			
521	Provide new compensating kitchen exhaust hood and dedicated MAU							
522	Allowance for new exhaust hood & gas fired MAU c/w gas pipework, ductwork, etc.	1	ls	100,000.00	100,000			
523	Clean / seal ductwork							
524	Allowance to clean / seal any ductwork that is remaining in place	115,880	sf	0.50	57,940			
525	Provide ventilation to corridors & areas with inadequate ventilation							
526	Allowance to provide ventilation to corridors and other areas as required	115,880	sf	3.00	347,640			
527	Re-route fin tube radiation pipework							



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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST	
<b>RENOVATION</b>								
528	Allowance to move underslab pipework to be above ceiling with drops in concealed chases	115,880	sf	2.50	289,700			
529	<u>DHW heat exchanger</u>							
530	Allowance to replace domestic HW heat exchanger to operate at lower boiler temperatures	1	ls	20,000.00	20,000			
531	<u>Cooling to Admin</u>							
532	Allowance to provide cooling to main admin area	1	ls	65,000.00	65,000			
533	<u>Miscellaneous</u>							
534	Allowance for selective demolition	115,880	sf	1.00	115,880			
535	Allowance for misc. HVAC such as reworking of lockers rooms, installation of ceiling, etc.	115,880	sf	4.00	463,520			
536	HVAC sub-contract general conditions / requirements	1	ls	135,298.40	135,298			
537	SUBTOTAL					3,420,666		
538								
539	<b>TOTAL - HVAC</b>							<b>\$3,420,666</b>
540								
541								
542	<b>D40 FIRE PROTECTION</b>							
543								
544	<b>D40 FIRE PROTECTION, GENERALLY</b>							
545	Allowance for new sprinkler system	115,880	sf	5.00	579,400			
546	SUBTOTAL					579,400		
547								
548	<b>TOTAL - FIRE PROTECTION</b>							<b>\$579,400</b>
549								
550								
551	<b>D50 ELECTRICAL</b>							
552								
553	<b>D5010 SERVICE &amp; DISTRIBUTION</b>							
554	<b>Gear &amp; Distribution</b>							
555	Allowance to replace switchgear, panelboards, feeders, etc.	115,880	sf	5.40	625,752			
556	<u>Equipment Feeds &amp; Connections</u>							
557	<u>Replace unit ventilators</u>							
558	Allowance to disconnect old unit and reconnect new unit incl. amending wiring as required	49	ea	550.00	26,950			
559	<u>Replace existing boilers</u>							
560	Allowance for modifying existing / providing new feeders to boilers	1	ls	20,000.00	20,000			
561	<u>Replace back-up and older pumps / provide VFD's on back-ups pumps</u>							
562	Allowance for modifying existing / providing new feeders to pump	1	ls	5,000.00	5,000			
563	<u>Replace pneumatic controls with DDC controls</u>							
564	Allowance for electrical scope associated with DDC controls	115,880	sf	0.45	52,146			
565	<u>Replace terminal units</u>							
566	Allowance for modifying existing / providing new feeders as required	115,880	sf	0.20	23,176			
567	<u>Replace fans</u>							
568	Allowance for modifying existing / providing new feeders as required	115,880	sf	0.20	23,176			
569	<u>Replace H&amp;V AHU's to gym, auditorium and corridors</u>							
570	Allowance for modifying existing / providing new feeders as required	1	ls	20,000.00	20,000			
571	<u>Provide new compensating kitchen exhaust hood and dedicated MAU</u>							
572	Allowance for electrical scope	1	ls	25,000.00	25,000			



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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**RENOVATION**

573	<u>Provide ventilation to corridors &amp; areas with inadequate ventilation</u>							
574	Allowance for electrical scope	115,880	sf	0.50	57,940			
575	<u>Cooling to Admin</u>							
576	Allowance for electrical scope	1	ls	10,000.00	10,000			
577								
578	Allowance for misc. equipment feeds & connections	115,880	sf	1.50	173,820			
579	SUBTOTAL					1,062,960		
580								
581	<b>D5020 LIGHTING &amp; POWER</b>							
582	Allowance for new lighting	115,880	sf	6.75	782,190			
583	Allowance for new site lighting	1	ls	75,000.00	75,000			
584	Allowance for lighting controls	115,880	sf	1.80	208,584			
585	Allowance for branch power	115,880	sf	2.25	260,730			
586	SUBTOTAL					1,326,504		
587								
588	<b>D5030 COMMUNICATION &amp; SECURITY SYSTEMS</b>							
589	Allowance for addressable fire detection & alarm system	115,880	sf	2.25	260,730			
590	Allowance for DAS	115,880	sf	0.45	52,146			
591	Allowance for wireless master clock system	115,880	sf	0.15	17,382			
592	Allowance for new voice & data incl IP based intercom system	115,880	sf	3.60	417,168			
593	Allowance for access control / security system	115,880	sf	1.60	185,408			
594	Allowance for new AV system	115,880	sf	2.50	289,700			
595	SUBTOTAL					1,222,534		
596								
597	<b>D5040 OTHER ELECTRICAL SYSTEMS</b>							
598	Allowance for selective demolition	115,880	sf	1.00	115,880			
599	Grounding & bonding	115,880	sf	0.65	75,322			
600	Replace / repair lightning protection as required	115,880	sf	0.15	17,382			
601	Temporary power & lighting	115,880	sf	0.75	86,910			
602	Electrical general conditions & requirements	1	ls	117,224.76	117,225			
603	SUBTOTAL					412,719		
604								
605	<b>TOTAL - ELECTRICAL</b>						<b>\$4,024,717</b>	

**E10 EQUIPMENT**

**E10 EQUIPMENT, GENERALLY**

612	111000 EQUIPMENT						
613	Replace 12' long Dock bumper	1	ls	2,000.00	2,000		
614	Kiln & fume hood at art storage	1	ls	4,500.00	4,500		
615							
616	111620 THEATRICAL EQUIPMENT						
617	Theatrical Equipment Stage curtains and rigging	1	ls	90,000.00	90,000		
618							
619	111250 PROJECTION SCREENS						
620	Projection screen 7'	1	loc	1,500.00	1,500		
621	Movie screen at auditorium 14'	1	loc	6,000.00	6,000		
622							
623	113100 APPLIANCES						



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<b>RENOVATION</b>								
624	Refrigerator	1	ea	1,200.00	1,200			
625	Range	1	ea	1,000.00	1,000			
626	Exhaust fan	1	ea	1,200.00	1,200			
627	Washer	1	ea	800.00	800			
628	Dryer	1	ea	900.00	900			
629								
630	115000 LABORATORY EQUIPMENT							
631	Fume hoods	1	ea	9,000.00	9,000			
632								
633	114000 FOOD SERVICE EQUIPMENT							
634	Kitchen equipment					By Others		
635								
636	116600 ATHLETIC EQUIPMENT							
637	Gym wall pads	594	sf	12.00	7,128			
638	Basketball backstops	4	ea	9,800.00	39,200			
639	Retractable bleachers	370	seats	140.00	51,800			
640	SUBTOTAL						216,228	
641								
642	<b>TOTAL - EQUIPMENT</b>							<b>\$216,228</b>
643								
644								
645	<b>E20 FURNISHINGS</b>							
646								
647	<b>E2010 FIXED FURNISHINGS</b>							
648								
649	123553 CASEWORK							
650	Arts base cabinet/counter	24	lf	450.00	10,800			
651	Arts island w/ base cabinet 5' wide	9	lf	600.00	5,400			
652	Band room casework	14	lf	400.00	5,600			
653	Base cabinet/counter	386	lf	350.00	135,100			
654	GS 24"	3	ea	1,400.00	4,200			
655	GS 36"	3	ea	1,900.00	5,700			
656	TW 72"	14	ea	2,800.00	39,200			
657	Wall cabinets	15	lf	290.00	4,350			
658	Patch/repair base cabinet after being cut for ADA access	1	loc	500.00	500			
659	Tech rack at chair storage	1	loc	800.00	800			
660								
661	126000 THEATRICAL SEATING							
662	New auditorium seating	735	seats	350.00	257,250			
663	SUBTOTAL						468,900	
664								
665	<b>E2020 MOVABLE FURNISHINGS</b>							
666	All movable furnishings to be provided and installed by owner							
667	SUBTOTAL						NIC	
668								
669	<b>TOTAL - FURNISHINGS</b>							<b>\$468,900</b>
670								
671								
672	<b>F20 SELECTIVE BUILDING DEMOLITION</b>							
673								
674	<b>F2010 BUILDING ELEMENTS DEMOLITION</b>							



Feasibility Study Estimate

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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>RENOVATION</b>							
675	Demolish base cabinet/counter	123	lf	10.00	1,230		
676	Demolish cabinets (furniture)	79	lf	10.00	790		
677	Demolish cabinets (furniture) replace to be accessible	13	lf	10.00	130		
678	Demolish floor finishes	60,376	sf	1.75	105,658		
679	Demolish teacher table science	2	ea	50.00	100		
680	Demolish bench	16	lf	8.00	128		
681	Demolish CIP risers at choral room	405	sf	20.00	8,100		
682	Demolish interior partitions	5,720	sf	4.00	22,880		
683	Remove existing lockers/changing stalls at locker rooms	190	lf	15.00	2,850		
684	Relocate doors and frames - double	2	ea	250.00	500		
685	Relocate doors and frames - single	3	ea	200.00	600		
686	Remove section of masonry partition to allow for Borrowed light	36	sf	15.00	540		
687	Remove projector and return to owner	22	ea	75.00	1,650		
688	Remove smart board and return to owner	27	ea	50.00	1,350		
689	Remove teacher wardrobe	14	ea	15.00	210		
690	Remove basketball backstops	4	ea	900.00	3,600		
691	Remove and dispose doors and frames - double	7	ea	100.00	700		
692	Remove and dispose doors - single	2	ea	75.00	150		
693	Remove and dispose doors and frames - single	50	ea	125.00	6,250		
694	Remove and dispose interior storefront	35	sf	10.00	350		
695	Remove and dispose interior storefront doors - double	1	ea	125.00	125		
696	Remove fume hood at science	1	ea	400.00	400		
697	Remove base cabinet/counter	8	lf	15.00	120		
698	Remove borrowed light	2,079	sf	6.00	12,474		
699	Remove bleachers	740	lf	25.00	18,500		
700	Remove ceiling finish	17,073	sf	2.00	34,146		
701	Remove circulation desk	15	lf	15.00	225		
702	Remove concrete stairs to gym & exercise area from gym	2	ea	1,500.00	3,000		
703	Remove corridor ramp handrails	114	lf	10.00	1,140		
704	Remove desk at general office	26	lf	10.00	260		
705	Remove egress stair	4	flt	5,000.00	20,000		
706	Remove guard rail at exercise areas	161	lf	10.00	1,610		
707	Remove guardrails at corridor stairs	23	lf	10.00	230		
708	Remove gym wall pads	594	sf	1.50	891		
709	Remove HM sidelight/frame	140	sf	4.00	560		
710	Remove kiln & hood art storage	2	ea	400.00	800		
711	Remove lockers	382	ea	20.00	7,640		
712	Remove metal bench 8'	1	loc	50.00	50		
713	Remove old curtain track at auditorium floor	88	lf	20.00	1,760		
714	Remove polished glass locker rooms	81	sf	8.00	648		
715	Cut and remove section of Base cabinet/counter for ADA	2	lf	15.00	30		
716	Cut and remove section of guard rail	11	lf	10.00	110		
717	Remove section of interior partition for single door opening	3	ea	254.00	762		



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<b>RENOVATION</b>								
718	Remove supply storage shelving	37	lf	10.00	370			
719	Remove tables at serving	36	lf	10.00	360			
720	Remove teacher wardrobe	14	ea	20.00	280			
721	Remove toilet accessories gang	17	ea	400.00	6,800			
722	Remove toilet accessories single	9	ea	250.00	2,250			
723	Remove toilet partitions	20	ea	100.00	2,000			
724	Remove wire mesh partition	16	lf	20.00	320			
725	Remove wood bench	16	lf	10.00	160			
726	Remove wood frame stairs and floor at ticket office	1	ea	750.00	750			
727	Remove existing folding partition	1,620	sf	2.00	3,240			
728	Sandblast epoxy flooring	19,028	sf	2.50	47,570			
729	Remove existing auditorium seating	735	ea	40.00	29,400			
730	MEP demolition; cut and cap in trades	115,880	gsf	1.00	115,880			
731	Miscellaneous demolition and dust control	115,880	gsf	1.50	173,820			
732	SUBTOTAL					646,447		
733								
734	<b>F2020 HAZARDOUS COMPONENTS ABATEMENT</b>							
735	See main summary for HazMat allowance					See Summary		
736	SUBTOTAL							
737								
738	<b>TOTAL - SELECTIVE BUILDING DEMOLITION</b>						<b>\$646,447</b>	



Feasibility Study Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**G SITEWORK**

**G10 SITE PREPARATION & DEMOLITION**

Site Demolitions and Relocations

Site construction fence/barricades; visual screen	3,000	lf	14.00	42,000		
Allowance to remove trees along entrance for new pedestrian/bike access	1,400	lf	20.00	28,000		

Site Earthwork

Construction entrances/wheel washes (allowance)	1	loc	12,000.00	12,000		
Strip topsoil, store; assume 12"	696	cy	16.00	11,136		
Cut/fill	304	cy	12.00	3,648		
Export materials off site	304	cy	30.00	9,120		
Fine grading	2,087	sy	1.50	3,131		
Silt fence/erosion control (allowance)	1,100	lf	12.00	13,200		
Erosion Control monitoring & maintenance	1	ls	5,000.00	5,000		

Hazardous Waste Remediation

SUBTOTAL						127,235
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**G20 SITE IMPROVEMENTS**

Pedestrian paving at ADA access to athletic fields

Concrete paving	1,280	sf		-		
gravel base; 8" thick	32	cy	40.00	1,280		
concrete paving; 4" thick	1,280	sf	8.00	10,240		

Pedestrian/bike paving to school entrance

Concrete paving	7,600	sf		-		
gravel base; 8" thick	189	cy	40.00	7,560		
concrete paving; 4" thick	7,600	sf	8.00	60,800		
Road markings	1	ls	2,000.00	2,000		
Granite curb	1,900	lf	38.00	72,200		
Modify existing line striping layout to accommodate new ADA in close proximity to entrance	1	ls	2,000.00	2,000		

Fire lane

Bituminous concrete paving	9,900	sf				
gravel base; 18" thick	550	cy	40.00	22,000		
bituminous concrete; 4" thick	1,100	sy	26.00	28,600		
Granite curb	2,210	lf	38.00	83,980		

Landscaping & Plantings:

Reseeded disturbed areas along fire lane and pedestrian access	6,000	sf	1.00	6,000		
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SUBTOTAL						296,660
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**G30 CIVIL MECHANICAL UTILITIES**

Nerw water supply for fire protection	1	ls	50,000.00	50,000		
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334000 STORM DRAINAGE UTILITIES

Rebuild stormwater headwall to wetland/pond	1	ls	20,000.00	20,000		
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SUBTOTAL						70,000
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<b>SUBTOTAL - SITE DEVELOPMENT</b>						<b>\$493,895</b>
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