

PROJECT BUDGET

SECTION 6

PROJECT BUDGET

The Owner's Project Manager, Ryegate, Inc. has developed, with oversight by the SBC and PBC, the Total Project Cost budget, which has been summarized into two major parts: Grant Eligible Costs and Required Ineligible Costs.

Two independent Progress Schematic Design Construction Cost estimates were developed by Ryegate, Inc., and SMMA, with oversight by design and construction professionals on the SBC and PBC. These separate estimates have been reconciled and are represented by the budgets contained herein. These estimates have been drawn from current and projected construction costs, knowledge of the site conditions, and an understanding of phasing and project management.

The Required Ineligible Costs include: balance of escalation (12% total less the 5% in the Grant Eligible Costs = 7%); balance of contingency (8% standard less the 5% in Grant Eligible Costs = 3%); short-term additional classroom space for increased enrollment; additional sustainable design elements; off-street parking; sidewalk/traffic mitigation; additional emergency generator capacity; air conditioning of all academic areas; Seaver Street properties acquisition costs; and, prior planning appropriations.

Grant Eligible Cost Summary

Construction

Schematic Design Construction Cost Estimate
Escalation to June 2009

5.00%

Total Construction

Architectural & Engineering

Design thru Construction Administration Services
Additional Design Consultants/Permitting
Expenses

Total Architectural & Engineering

Other Professional Services

Owners Project Manager
Material Testing - concrete, steel, masonry, windows
Material Testing - geotech
Hazardous Materials/AQ Monitoring - during construction
Roof Inspection Services
MLP - Electric Department Charges
Fiber Optic Town Network
Town Wide Fire Alarm Loop
Fire Prevention Review
Traffic Peer Review
Structural Peer Review
M / E / P Commissioning
Other Services - CATV Service
Other Services - Telephone Service

Total Other Professional Services

Furnishings, Fixtures & Equipment

Fixtures / Furniture & Equipment from School Admin
Technology Equipment from School IT

Total Furnishings, Fixtures & Equipment

Other Project related Expenses

Relocation Expenses
PBC Personal Services
PBC Expenses - including advertisement
Building Permits
Plumbing and Electrical permits
Builder's Risk Insurance
Bond Issuance
Printing / Distribution of Bid documents

Total Other Project Related Expenses

Project Contingency - 5% of Construction Cost
Project Contingency - Beyond 5% of Construction Cost (8% - 5%)

5%

3%

Total Project Contingency

TOTAL

Budget 280,000 sf New School	
\$83,982,656	
\$4,199,133	
\$88,181,789	
\$7,056,000	
\$850,000	
\$280,000	
\$8,186,000	
\$2,260,171	
\$150,000	
\$100,000	
\$80,000	
\$40,000	
\$175,000	
\$16,500	
\$10,000	
\$18,000	
\$10,000	
\$20,000	
by MSBA	
\$30,000	
\$40,000	
\$2,949,671	
\$2,586,900	
\$2,190,000	
\$4,776,900	
\$293,000	
\$282,429	
\$60,150	
\$100,000	
\$50,000	
\$421,450	
\$250,000	
\$80,000	
\$1,537,029	
\$4,409,089	
\$0	
\$4,409,089	
\$110,040,478	

MLP Rebate for Energy Modeling (up to \$42,500)

(\$42,500)

\$109,997,978

Combined Grant Eligible Cost and Required Ineligible Cost Summary

Construction

Schematic Design Construction Cost Estimate
 Escalation to June 2009
 Escalation to 2010 (beyond 5%)

Total Construction

Architectural & Engineering

Design thru Construction Administration Services
 Additional Design Consultants/Permitting Expenses

Total Architectural & Engineering

Other Professional Services

Owners Project Manager
 Clerk of Works
 Material Testing - concrete, steel, masonry, windows
 Material Testing - geotech
 Hazardous Materials/AQ Monitoring - during construction
 Roof Inspection Services
 DPW - Connection Charges
 MLP - Electric Department Charges
 Fiber Optic Town Network
 Town Wide Fire Alarm Loop
 Fire Prevention Review
 Traffic Peer Review
 Structural Peer Review
 M / E / P Commissioning
 Other Services - CATV Service
 Other Services - Telephone Service
 Technology System - survey/design - by school department (enrollment classrooms)

Total Other Professional Services

Furnishings, Fixtures & Equipment

Fixtures / Furniture & Equipment from School Admin
 Technology Equipment from School IT
 TV Studio Equipment (no Town Studio-school studio included in tech budget above)

Total Furnishings, Fixtures & Equipment

Other Project related Expenses

Relocation Expenses
 PBC Personal Services
 PBC Expenses - including advertisement
 Building Permits
 Plumbing and Electrical permits
 Builder's Risk Insurance
 Bond Issuance
 Printing / Distribution of Bid documents

Total Other Project Related Expenses

Project Contingency - 5% of Construction Cost
 Project Contingency - Beyond 5% of Construction Cost (8% - 5%)

Total Project Contingency

TOTAL

MLP Rebate for Energy Modeling (up to \$42,500)

Grant Eligible Costs	Required Ineligible Costs			Combined Grant Eligible and Required Ineligible Costs			
	Budget 280,000 sf New School	Emergency Shelter Power	Full Air Cond. except Kitchen, Gym & Locker Rooms	Additional Sustainable Design	Escalation beyond the 5% for June 2009 (12% - 5%)	Contingency beyond 5% (8% - 5%)	Total Building
	\$83,982,656	\$372,804	\$2,038,310	\$1,334,451	\$0	\$0	\$87,728,221
5.00%	\$4,199,133	\$18,640	\$101,916	\$66,723	\$0	\$0	\$4,386,412
7.00%	\$0	\$27,401	\$149,816	\$98,826	\$6,174,000	\$0	\$6,450,043
	\$88,181,789	\$418,845	\$2,290,042	\$1,500,000	\$6,174,000	\$0	\$98,564,676
	\$7,056,000	\$0	\$0	\$0	\$0	\$0	\$7,056,000
	\$850,000	\$0	\$0	\$0	\$0	\$0	\$850,000
	\$280,000	\$0	\$0	\$0	\$0	\$0	\$280,000
	\$8,186,000	\$0	\$0	\$0	\$0	\$0	\$8,186,000
	\$2,260,171	\$0	\$0	\$0	\$0	\$0	\$2,260,171
w/ OPM services	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$150,000	\$0	\$0	\$0	\$0	\$0	\$150,000
	\$100,000	\$0	\$0	\$0	\$0	\$0	\$100,000
	\$80,000	\$0	\$0	\$0	\$0	\$0	\$80,000
	\$40,000	\$0	\$0	\$0	\$0	\$0	\$40,000
	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$175,000	\$0	\$0	\$0	\$0	\$0	\$175,000
	\$16,500	\$0	\$0	\$0	\$0	\$0	\$16,500
	\$10,000	\$0	\$0	\$0	\$0	\$0	\$10,000
	\$18,000	\$0	\$0	\$0	\$0	\$0	\$18,000
	\$10,000	\$0	\$0	\$0	\$0	\$0	\$10,000
	\$20,000	\$0	\$0	\$0	\$0	\$0	\$20,000
by MSBA	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$30,000	\$0	\$0	\$0	\$0	\$0	\$30,000
	\$40,000	\$0	\$0	\$0	\$0	\$0	\$40,000
	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$2,949,671	\$0	\$0	\$0	\$0	\$0	\$2,949,671
	\$2,586,900	\$0	\$0	\$0	\$0	\$0	\$2,586,900
	\$2,190,000	\$0	\$0	\$0	\$0	\$0	\$2,190,000
	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$4,776,900	\$0	\$0	\$0	\$0	\$0	\$4,776,900
	\$293,000	\$0	\$0	\$0	\$0	\$0	\$293,000
	\$282,429	\$0	\$0	\$0	\$0	\$0	\$282,429
	\$60,150	\$0	\$0	\$0	\$0	\$0	\$60,150
	\$100,000	\$0	\$0	\$0	\$0	\$0	\$100,000
	\$50,000	\$0	\$0	\$0	\$0	\$0	\$50,000
	\$421,450	\$0	\$0	\$0	\$0	\$0	\$421,450
	\$250,000	\$0	\$0	\$0	\$0	\$0	\$250,000
	\$80,000	\$0	\$0	\$0	\$0	\$0	\$80,000
	\$1,537,029	\$0	\$0	\$0	\$0	\$0	\$1,537,029
5%	\$4,409,089	\$0	\$0	\$0	\$0	\$0	\$4,409,089
3%	\$0	\$0	\$0	\$0	\$0	\$2,646,000	\$2,646,000
	\$4,409,089	\$0	\$0	\$0	\$0	\$2,646,000	\$7,055,089
TOTAL	\$110,040,478	\$418,845	\$2,290,042	\$1,500,000	\$6,174,000	\$2,646,000	\$123,069,365

\$109,997,978	\$418,845	\$2,290,042	\$1,500,000	\$6,174,000	\$2,646,000	\$123,026,865
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Combined Grant Eligible Cost and Required Ineligible Cost Summary

Construction

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 Escalation to June 2009
 Escalation to 2010 (beyond 5%)

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Project Contingency - 5% of Construction Cost
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Total Project Contingency

TOTAL

Required Ineligible Costs								
Off Site Parking	Street Improvements (Reconstruct Rice Street)	Traffic Improvements	Sidewalk Mitigation		Interior Enrollment Modifications		Seaver Street Properties	Prior Planning Appropriations
\$650,000	\$380,000	\$976,308	\$120,000		\$1,111,100		\$0	\$0
5.00% \$32,500	\$19,000	\$48,815	\$6,000		Escalation included above		\$0	\$0
7.00% \$0	\$26,600	\$68,342	\$8,400				\$0	\$0
\$682,500	\$425,600	\$1,093,465	\$134,400		\$1,111,100		\$0	\$0
\$68,250	\$42,560	\$164,020	\$20,160		\$162,000		\$0	\$0
\$20,000	\$15,000	\$80,000	\$20,000		\$0		\$0	\$0
\$0	\$0	\$0	\$0		\$0		\$0	\$0
\$88,250	\$57,560	\$244,020	\$40,160		\$162,000		\$0	\$0
\$0	\$12,257	\$0	\$0		\$38,000		\$0	\$0
\$0	\$0	\$0	\$0		\$0		\$0	\$0
\$0	\$0	\$0	\$0		\$5,000		\$0	\$0
\$5,000	\$5,000	\$5,000	\$5,000		\$0		\$0	\$0
\$0	\$0	\$0	\$0		\$10,000		\$0	\$0
\$0	\$0	\$0	\$0		\$0		\$0	\$0
\$0	\$0	\$0	\$0		\$0		\$0	\$0
\$1,000	\$1,036	\$4,392	\$0		\$0		\$0	\$0
\$0	\$0	\$0	\$0		\$0		\$0	\$0
\$0	\$0	\$0	\$0		\$0		\$0	\$0
\$0	\$0	\$0	\$0		\$4,000		\$0	\$0
\$0	\$0	\$2,000	\$0		\$0		\$0	\$0
\$0	\$0	\$0	\$0		\$1,500		\$0	\$0
\$0	\$0	\$0	\$0		\$0		\$0	\$0
\$0	\$0	\$0	\$0		\$0		\$0	\$0
\$0	\$0	\$0	\$0		\$0		\$0	\$0
\$0	\$0	\$0	\$0		\$4,500		\$0	\$0
\$6,000	\$18,293	\$11,392	\$5,000		\$63,000		\$0	\$0
\$0	\$0	\$0	\$0		\$66,000		\$0	\$0
\$0	\$0	\$0	\$0		\$59,500		\$0	\$0
\$0	\$0	\$0	\$0		\$0		\$0	\$0
\$0	\$0	\$0	\$0		\$125,500		\$0	\$0
\$0	\$0	\$0	\$0		\$10,000		\$0	\$0
\$11,621	\$49,234	\$50,217	\$10,000		\$11,600		\$0	\$0
\$0	\$0	\$0	\$0		\$0		\$0	\$0
\$0	\$0	\$0	\$0		\$16,700		\$0	\$0
\$1,500	\$0	\$2,500	\$0		\$2,650		\$0	\$0
\$0	\$0	\$0	\$0		\$0		\$0	\$0
\$0	\$0	\$0	\$0		\$0		\$0	\$0
\$0	\$0	\$0	\$0		\$4,000		\$0	\$0
\$13,121	\$49,234	\$52,717	\$10,000		\$44,950		\$0	\$0
5% \$34,125	\$21,280	\$54,673	\$6,720		\$116,000	10-20%	\$0	\$0
3% \$20,475	\$12,751	\$32,796	\$4,030				\$0	\$0
\$69,221	\$83,265	\$142,686	\$20,750		\$167,600		\$0	\$0
\$844,471	\$584,718	\$1,489,063	\$200,310		\$1,622,550		\$3,609,500	\$1,300,000

MLP Rebate for Energy Modeling (up to \$42,500)

\$3,118,563		\$1,622,550	\$3,609,500	\$1,300,000
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Project Total Costs	\$132,677,478
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**Wellesley High School
Wellesley, MA**

October 9, 2008

Schematic Design Estimate

Client:

Symmes, Maini & McKee Associates

Designer:

Symmes, Maini & McKee Associates
1000 Massachusetts Ave
Cambridge, MA

Cost Estimator:

Daedalus Projects Incorporated
112 South Street
Boston, MA 02111
(617) 451 2717

INTRODUCTION

Project Description:

Schematic Design level estimate for Wellesley High School .The design comprises a complete new-build 280,000 GSF high school. With ensuing demolition of the old school, and a second phase of site development

Project Particulars:

- Conceptual documents drawings received upto Sep 05, 2008 prepared by SMMA
- Daedalus Projects, Inc. experience with similar projects of this nature.

Project Assumptions:

- Our estimate assumes that the project will be a design - bid- build under Chapter 149 requirements using pre-selected General Contractors (**not** chapter 149A - CM at risk)
- Our estimate assumes bona fide bid returns from no less than three pre-qualified Filed sub-contractors for each filed sub-bid
- The Total Construction Cost reflects the fair construction value of this project in a competitive bidding market.
- Unit rates are based on current dollars, using **prevailing** wages (no PLA agreement)
- Escalation for anticipated start of construction June 2009 has been carried at 5%
- Subcontractor's markups have been included in each unit rate. Markups cover the cost of field overhead, home office overhead and subcontractor's profit.
- Design and Pricing Contingency markup is an allowance for unforeseen design issues, design detail development and specification clarifications.
- General Conditions and Requirements value covers Sub-Contractor's bond, site office overheads, and building permit applications.
- Overhead and profit markup is calculated on a percentage basis of direct construction costs. The value covers Contractor's bond, insurance and profit.

INTRODUCTION

Project Exclusions:

- Construction Contingency
- Interest expense.
- Owner's project administration.
- Construction of temporary facilities,
- Relocation expenses.
- Printing and advertising.
- Specialties, loose furnishings, fixtures and equipment beyond what is noted.
- Site or existing condition surveys and investigations.
- Utility company back charges during construction
- Testing and commissioning.
- Loose furniture, desks , tables, files and cabinets

MAIN SUMMARY

Wellesley High School
Wellesley, MA

		GFA	TOTAL	COST/SF	
Site Development / infrastructure			\$8,545,653	\$30.52	
New construction		280,000	\$58,789,322	\$209.96	
	Sub-total		\$67,334,975	\$240.48	
	Estimating Contingency 10%		\$6,733,498	\$24.05	
	Trades sub-total		\$74,068,473	\$264.53	
Markups					
	General Conditions and Requirements (9 mths site-works contract and 30 mths main contract)	1	LS	\$5,032,398	\$17.97
	Insurance 1%		\$673,350	\$2.40	
	Bonds 0.75%		\$505,012	\$1.80	
	Permit		\$0	\$0.00	
	Overhead 2.00%		\$1,481,369	\$5.29	
	Profit 3.00%		\$2,222,054	\$7.94	
		by Owner			
	ESTIMATED CONSTRUCTION COST, SEP 2008		\$83,982,656	\$299.94	
	Escalation 5.00%		\$4,199,133	\$15.00	
	ESTIMATED CONSTRUCTION COST, JUN 2009 START		\$88,181,789	\$314.93	
Additional Sustainable design detail					
	Green roof		\$203,148		
	Rainwater harvesting		\$385,095		
	Dual flush toilets		\$40,265		
	Displacement ventilation		\$98,868		
	Photovoltaic		\$371,518		
	Data acquisition system		\$39,600		
	Geothermal heating and cooling for admin		\$262,680		
	Total, incl markups		\$1,401,174		
Costs outside of the contract ,incl markups					
	Additional sustainable design		\$1,401,174		
	Additional air conditioning		\$2,140,226		
	Increased emergency generator		\$391,445		
			\$92,114,633	\$328.98	

SYSTEMS COST SUMMARY			
DIV.NO.	TRADE DESCRIPTION	TOTAL \$	COST SQ/FT
A10	FOUNDATIONS	\$2,656,530	\$9.49
A20	BASEMENT CONSTRUCTION	\$87,496	\$0.31
B10	STRUCTURE	\$8,984,922	\$32.09
B20	EXTERIOR CLOSURE	\$9,273,665	\$33.12
B30	ROOFING	\$2,589,307	\$9.25
C10	INTERIOR CONSTRUCTION	\$5,462,756	\$19.51
C20	STAIRCASES	\$458,888	\$1.64
C30	INTERIOR FINISHES	\$4,382,941	\$15.65
D10	VERTICAL MOVEMENT	\$343,566	\$1.23
D15	MECHANICAL	\$12,225,654	\$43.66
D50	ELECTRICAL	\$6,905,864	\$24.66
E10	EQUIPMENT	\$3,546,486	\$12.67
E20	FURNISHINGS	\$1,871,248	\$6.68
F10	SPECIAL CONSTRUCTION	\$0	\$0.00
F20	SELECTIVE DEMOLITION	\$0	\$0.00
TOTAL CONSTRUCTION COST		<u>\$58,789,322</u>	<u>\$209.96</u>
		GSF	280,000

SYS	DESCRIPTION	QTY	UNIT	UNIT COST \$	EST'D COST \$	SUB TOTAL \$	TOTAL COST \$
1	A10 FOUNDATIONS						
2							
3	A1010 STANDARD FOUNDATIONS	100,448	SF				
4	Wall Foundations(1011)						
5	<u>Exterior Strip Footings -</u>	2,075	LF	104.07			\$215,951
6	Excavation	2,306	CY	\$11.77	\$27,144		
7	Remove from site	2,306	CY	\$21.41	\$49,353		
8	Backfill with imported fill	2,144	CY	\$19.27	\$41,308		
9	Formwork	4,150	SF	\$8.56	\$35,534		
10	Re-bar	8,231	LBS	\$1.12	\$9,250		
11	Concrete	161	CY	\$155.19	\$25,047		
12	Place from truck & vibrate	161	CY	\$42.81	\$6,909		
13	Premium for trenching in rock or for boulder removal	500	CY	\$42.81	\$21,406		
14							
15							
16	<u>Thickening under slab</u>	800	LF	67.19			\$53,752
17	Excavation	237	CY	\$11.77	\$2,791		
18	Remove from site	237	CY	\$21.41	\$5,074		
19	Backfill with imported fill	144	CY	\$19.27	\$2,769		
20	Formwork	1,600	SF	\$8.56	\$13,700		
21	Re-bar	8,400	LBS	\$1.12	\$9,440		
22	Concrete	93	CY	\$155.19	\$14,485		
23	Place from truck & vibrate	93	CY	\$42.81	\$3,996		
24	Premium for trenching in rock or for boulder removal	40	CY	\$37.46	\$1,498		
25							
26	<u>Tie Beams</u>	480	LF	181.90			\$87,310
27	Excavation	711	CY	\$11.77	\$8,372		
28	Remove from site	711	CY	\$21.41	\$15,222		
29	Backfill with imported fill	562	CY	\$19.27	\$10,823		
30	Formwork	960	SF	\$8.56	\$8,220		
31	Re-bar	13,440	LBS	\$1.12	\$15,104		
32	Concrete	149	CY	\$155.19	\$23,176		
33	Place from truck & vibrate	149	CY	\$42.81	\$6,393		
34	Premium for trenching in rock or for boulder removal	0	CY				
35							
36	<i>Frost walls/ foundation walls 12" thick</i>	8,300	SF	35.66			\$295,944
37	Formwork	16,600	SF	\$10.17	\$168,786		
38	Re-bar	20,750	LBS	\$1.12	\$23,319		
39	Concrete	323	CY	\$155.19	\$50,093		
40	Place from truck & vibrate	323	CY	\$48.16	\$15,546		
41	2" insulation	8,300	sf	\$2.57	\$21,320		
42	Damprproofing	8,300	SF	\$2.03	\$16,879		
43	Column Foundations (1012)	200	EA				
44							
45	<u>Column Footings, interior</u>	100	EA	3,793.14			\$379,314
46	Excavation	2,625	CY	\$12.84	\$33,714		
47	Remove from site	2,625	CY	\$21.41	\$56,191		
48	Backfill with imported fill	1,925	CY	\$19.27	\$37,086		
49	Formwork	8,000	SF	\$8.03	\$64,218		
50	Re-bar	35,000	LBS	\$1.12	\$39,334		
51	Concrete	700	CY	\$155.19	\$108,635		
52	Place from truck	700	CY	\$48.16	\$33,714		
53	Set anchor bolts grout plates	100	EA	\$64.22	\$6,422		

	SYS	DESCRIPTION	QTY	UNIT	UNIT COST \$	EST'D COST \$	SUB TOTAL \$	TOTAL COST \$
54								
55		Column Footings, perimeter	100	EA	2,062.74		\$206,274	
56		Excavation	1,313	CY	\$12.84	\$16,857		
57		Remove from site	1,313	CY	\$21.41	\$28,095		
58		Backfill with imported fill	963	CY	\$19.27	\$18,543		
59		Formwork	5,600	SF	\$8.03	\$44,953		
60		Re-bar	18,000	LBS	\$1.12	\$20,229		
61		Concrete	350	CY	\$155.19	\$54,318		
62		Place from truck	350	CY	\$48.16	\$16,857		
63		Set anchor bolts grout plates	100	EA	\$64.22	\$6,422		
64								
65		Piers and pilasters to interior and exterior columns	150	EA			\$123,513	
66		Formwork	4,800	SF	\$10.44	\$50,090		
67		Re-bar	26,133	LBS	\$1.12	\$29,369		
68		Concrete	218	CY	\$155.19	\$33,798		
69		Place from truck	218	CY	\$47.09	\$10,256		
70								
71								
72	1020	SPECIAL FOUNDATION CONDITIONS	100,448	SF			\$153,053	
73		Keyways and waterstops	1	LS	\$13,378.75	\$13,379		
74		Perimeter foundation drain	2,200	LF	\$18.20	\$40,029		
75		Dewatering	1	LS	\$16,054.50	\$16,055		
76		Elevator pit incl waterproofing	2	EA	\$8,348.34	\$16,697		
77		Winter working premium	1	LS	\$32,109.00	\$32,109		
78		Hand excavation allowance near extg building or utilities	500	M/HR	\$69.57	\$34,785		
79								
80								
81	A1030	SLAB ON GRADE						
82		Slab on Grade(1031)						
83		<u>4" - 6" thick slab</u>	100,448	SF	11.36		\$1,141,420	
84		Rough and fine grade for new slab	100,448	SF	\$0.75	\$75,257		
85		Stone base to new slab 8" thick	3,720	CY	\$31.04	\$115,473		
86		Vapor barrier at slab on grade	100,448	SF	\$1.34	\$134,387		
87		Rigid insulation to new slab on grade	100,448	SF	\$2.84	\$284,900		
88		Concrete 4 1/2"	1,535	CY	\$144.49	\$221,738		
89		Additional thickness in certain areas	194	CY	\$144.49	\$28,095		
90		WWF	115,515	SF	\$0.64	\$74,182		
91		Cure, screed and place slab on grade	100,448	SF	\$1.93	\$193,517		
92		Perimeter expansion joint	2,160	LF	\$6.42	\$13,871		
93								
94								
95		TOTAL SYSTEM A10 FOUNDATIONS						\$2,656,530
96								
97	A20	BASEMENT						
98								
99	A2010	BASEMENT	5,100	SF			\$29,489	
100		Excavate to reduce levels at Auditorium - avg 3' deep	567	CY	\$13.91	\$7,885		
101		Remove excavated material from site	567	CY	\$21.41	\$12,130		
102		Backfill around new walls	214	CY	\$19.27	\$4,123		
103		Ground water control	1	LS	\$5,351.50	\$5,352		
104								

	SYS	DESCRIPTION	QTY	UNIT	UNIT COST \$	EST'D COST \$	SUB TOTAL \$	TOTAL COST \$
105	A2020	BASEMENT WALLS						
106								
107		<u>14" thick retaining walls</u>	1,520	SF	38.16		\$58,007	
108		Retaining wall	1,520	SF	\$38.16	\$58,007		
109								
110		TOTAL SYSTEM A20 BASEMENT						\$87,496
111								
112	B10	STRUCTURE						
113								
114	B1010	FLOOR CONSTRUCTION						
115		Upper Floor (1012)						
116								
117		<u>Floor construction type A</u>	153,852	SF	33.63		\$5,174,612	
118		Lightweight Concrete to upper floors	2,368	CY	\$178.74	\$423,314		
119		WWF at upper slabs	176,930	SF	\$0.64	\$113,621		
120		Cure, screed and place upper slabs	153,852	SF	\$1.93	\$296,402		
121		Structural steel - flange steel only	715	TNS	\$3,960.11	\$2,833,109		
122		Metal floor deck 3" 20 gauge	153,852	SF	\$3.26	\$502,237		
123		Shear studs	15,385	EA	\$6.42	\$98,801		
124		Spray-on fireproofing to new upper floor structure; 2hr	230,778	SF	\$2.46	\$568,104		
125		Allowance for firestopping penetrations, edges of slabs etc	153,852	SF	\$0.32	\$49,400		
126		Brace frames - HS steel	66	TNS	\$4,388.23	\$289,623		
127								
128								
129		<u>Floor construction type B</u>	25,700	SF	41.83		\$1,075,145	
130		Normal weight Concrete to upper floors	583	CY	\$162.69	\$94,847		
131		WWF at upper slabs	29,555	SF	\$0.64	\$18,980		
132		Cure, screed and place upper slabs	25,700	SF	\$1.93	\$49,512		
133		Structural steel - flange steel only	145	TNS	\$3,960.11	\$572,483		
134		Metal floor deck 3" 20 gauge	25,700	SF	\$3.26	\$83,895		
135		Shear studs	3,213	EA	\$6.42	\$20,630		
136		Spray-on fireproofing to new upper floor structure; 2hr	38,550	SF	\$2.46	\$94,898		
137		Allowance for firestopping penetrations, edges of slabs etc	25,700	SF	\$0.32	\$8,252		
138		Brace frames - HS steel	30	TNS	\$4,388.23	\$131,647		
139								
140		<u>Miscellaneous</u>					\$358,577	
141		Stage floor structure	2,500	SF	\$25.69	\$64,218		
142		Catwalk incl guardrail	300	LF	\$449.53	\$134,858		
143		Stage fly	500	SF	\$58.87	\$29,433		
144		4" isolated concrete slab - complete	6,000	SF	\$16.59	\$99,538		
145		Expansion joints (floors and roofs)	815	LF	\$37.46	\$30,530		
146								
147	B1020	ROOF CONSTRUCTION						
148		<u>Roof construction type A</u>	70,585	SF	19.57		\$1,381,568	
149		Structural steel - open web joists / flange steel	221	TNS	\$3,960.11	\$873,514		
150		Metal deck 1 1/2" 20 gauge	70,585	SF	\$3.16	\$222,864		
151		Fireproofing roof steel 1hr	105,878	SF	\$1.98	\$209,643		
152		Rough blocking to roof	70,585	SF	\$1.07	\$75,547		
153								
154		<u>Roof construction type B</u>	6,000	SF	21.55		\$129,319	
155		Structural steel, flange	22	TNS	\$3,960.11	\$86,132		
156		Metal deck 1 1/2" 20 gauge	6,000	SF	\$3.16	\$18,944		
157		Fireproofing roof steel, 1hr	9,000	SF	\$1.98	\$17,820		
158		Rough blocking to roof	6,000	SF	\$1.07	\$6,422		

SYS	DESCRIPTION	QTY	UNIT	UNIT COST \$	EST'D COST \$	SUB TOTAL \$	TOTAL COST \$
159							
160	Roof construction type C	21,312	SF	29.77		\$634,410	
161	Acoustic Metal roof deck 1 1/2"	21,312	SF	\$6.42	\$136,861		
162	Structural steel to roof - flange steel only	119.88	TNS	\$3,960.11	\$474,738		
163	Fireproofing roof steel, not applicable	0	SF				
164	Rough blocking to roof	21,312	SF	\$1.07	\$22,810		
165							
166	Roof construction type D	7,551	SF	30.63		\$231,292	
167	Acoustic Metal roof deck 3"	7,551	SF	\$6.74	\$50,916		
168	Structural steel to roof	42.47	TNS	\$3,960.11	\$168,203		
169	premium for hollow section steel	8	TNS	\$481.64	\$4,091		
170	Fireproofing roof steel, not applicable	0	SF				
171	Rough blocking to roof	7,551	SF	\$1.07	\$8,082		
172	TOTAL SYSTEM B10 SUPERSTRUCTURE						\$8,984,922
173							
174	B20 EXTERIOR CLOSURE						
175							
176	B2010 EXTERIOR WALLS	115,445	SF				
177							
178							
179	<u>6" metal stud backup with 4 " brick veneer</u>	39,100	SF	63.00		\$2,463,295	
180	6" backup studwork	39,100	SF	\$7.49	\$292,941		
181	premium for 8" CMU at stairwells / Gym / Auditorium	15,800	SF	\$14.18	\$224,067		
182	Brick veneer, norman brick	39,100	SF	\$35.32	\$1,381,008		
183	Air / vapor barrier	39,100	SF	\$3.21	\$125,546		
184	Densglass sheathing	39,100	SF	\$2.57	\$100,437		
185	3" extruded insulation	39,100	SF	\$3.21	\$125,546		
186	Allow for caulking and sealants	39,100	SF	\$0.64	\$25,109		
187	Sample panels	1	LS	\$10,703.00	\$10,703		
188	Cast stone detailing	1,000	CF	\$117.73	\$117,733		
189	Brick patterns	15,000	SF	\$4.01	\$60,204		
190							
191	<u>6" metal stud backup with Arriscraft veneer</u>	27,400	SF	53.32		\$1,461,067	
192	6" backup studwork	27,400	SF	\$7.49	\$205,284		
193	4" CSMU veneer	27,400	SF	\$35.32	\$967,765		
194	Air / vapor barrier	27,400	SF	\$3.21	\$87,979		
195	Densglass sheathing	27,400	SF	\$2.57	\$70,383		
196	3" extruded insulation	27,400	SF	\$3.21	\$87,979		
197	Allow for caulking and sealants	27,400	SF	\$0.64	\$17,596		
198	Sample panels	1	LS	\$2,675.75	\$2,676		
199	Special pieces	1	LS	\$21,406.00	\$21,406		
200							
201	<u>6" metal stud backup with composite metal panel</u>	19,800	SF	64.93		\$1,285,537	
202	6" backup studwork	19,800	SF	\$6.96	\$137,748		
203	Composite metal panel	19,800	SF	\$50.30	\$996,021		
204	Air / vapor barrier	19,800	SF	\$3.21	\$63,576		
205	Densglass sheathing	19,800	SF	\$2.57	\$50,861		
206	Allow for caulking and sealants	19,800	SF	\$0.64	\$12,715		
207	Sample panels	1	LS	\$3,210.90	\$3,211		
208	Special pieces / trim	1	LS	\$21,406.00	\$21,406		
209							

SYS	DESCRIPTION	QTY	UNIT	UNIT COST \$	EST'D COST \$	SUB TOTAL \$	TOTAL COST \$
210	<u>Miscellaneous</u>					\$802,727	
211	Stairtower, comprising curtainwall, masonry and roofing (clock included elsewhere)	1	LS	\$109,705.75	\$109,706		
212	Allow for miscellaneous metals in exterior closure, for relieving angles, ties	115,445	SF	\$3.21	\$370,682		
213	Through wall sheet metal flashing	12,960	SF	\$16.05	\$208,066		
214	Parapet wall at green roof	150	LF	\$107.03	\$16,055		
215	Exterior column treatments	5	EA	\$4,816.35	\$24,082		
216	Expansion joints	115,445	SF	\$0.64	\$74,136		
217							
218	<u>Rooftop acoustical screens</u>					\$417,417	
219	Louvered screens to conceal HVAC units	7,500	SF	\$55.66	\$417,417		
220							
221	B2020 EXTERIOR WINDOWS	30,145	SF				
222							
223	Windows/storefronts (2021)	30,145	SF	89.23		\$2,689,819	
224	Curtainwall	5,875	SF	\$101.68	\$597,361		
225	Storefront	8,470	SF	\$80.27	\$679,908		
226	Aluminum windows	14,800	SF	\$74.92	\$1,108,831		
228	Louvres	1,000	SF	\$51.37	\$51,374		
227	Window trim - solid surface	2,145	LF	\$27.83	\$59,691		
229	Sunshade system	800	LF	\$240.82	\$192,654		
230							
231	B2030 EXTERIOR DOORS	40	lvs				
232	Glazed entry doors (2031)	36	lvs	3,856.05		\$138,818	
233	Entrances - insulated glass - exterior; double	18	PR	\$6,956.95	\$125,225		
234	Entrances - insulated glass - exterior; single	2	EA	\$3,746.05	\$7,492		
235	Powered door openers	2	LOC	\$3,050.36	\$6,101		
236							
237	Solid Exterior door (2032)	4	lvs			\$14,984	
238	Coiling doors - various sizes	1	EA	\$6,421.80	\$6,422		
239	Hollow metal exterior door; frame and hardware; single	4	EA	\$2,140.60	\$8,562		
240	TOTAL SYSTEM B20 EXTERIOR CLOSURE						\$9,273,665
241							
242	B30 ROOFING						
243							
244	B3010 ROOF COVERINGS	105,470	SF				
245							
246	<u>White PVC / TPO</u>	105,470	SF	17.73		\$1,870,044	
247	Roofing system complete with densdeck and insulation	105,470	SF	\$16.05	\$1,693,275		
248	premium for green roof - 4 x 4' pallets	8,100	SF	\$20.34	incl elsew		
249	Walk pads	3,500	SF	\$5.35	\$18,730		
250	Allow for flashings / fascias	105,470	SF	\$1.50	\$158,039		
251							
252							
253	<u>Miscellaneous Roofing.. incl canopy</u>	106,470	SF	6.21		\$660,910	
254	Roof hatches	2	EA	\$1,337.88	\$2,676		
255	Metal panel at roof overhang	9,900	SF	\$53.52	\$529,799		
256	Canopy complete allowance	1,000	SF	\$128.44	\$128,436		
257							

	SYS	DESCRIPTION	QTY	UNIT	UNIT COST \$	EST'D COST \$	SUB TOTAL \$	TOTAL COST \$
258	B3020	ROOF OPENINGS					\$58,353	
259		Allowance for roof penetrations	1	LS	\$10,703.00	\$10,703		
260		Unit Skylights	8	EA	\$470.93	\$3,767		
261		Smoke vents to stagehouse	5	EA	\$4,495.26	\$22,476		
262		Skylights allowance	200	SF	\$107.03	\$21,406		
263		TOTAL SYSTEM B30 ROOFING						\$2,589,307
264								
265	C10	INTERIOR CONSTRUCTION						
266								
267	C1010	PARTITIONS	366,185	SF			\$4,604,568	
268		<u>Interior masonry</u>						
269		4" brick veneer in interior locations allowance	6,000	SF	\$34.25	\$205,498		
270		4" CMU	12,600	SF	\$13.91	\$175,315		
271		8" CMU, MEP spaces and stairwells / elevator shafts	12,320	SF	\$20.34	\$250,536		
272		Misc metals for interior masonry	30,920	SF	\$1.23	\$38,058		
273								
274		<u>GWB Interior partitions</u>						
275		<u>Note corridor walls assumed 6" metal stud</u>						
276		New stud partition; typical; average cost - quantity given	279,500	SF	\$10.49	\$2,931,659		
277		GFRC column covers	385	LF	\$146.63	\$56,453		
278		Drywall lining to internal face of external wall	86,300	SF	\$3.37	\$290,956		
279		Isolated wall construction allowance	5,000	SF	\$17.12	\$85,624		
280		Rough carpentry internal partitions and ceilings (based on gross floor area	280,000	SF	\$1.07	\$299,684		
281		<u>Glazed walls</u>			\$0.00			
282		Glass partitions / interior windows, sidelights	4,600	SF	\$58.87	\$270,786		
283								
284	C1020	INTERIOR DOORS, FRAMES & HARDWARE	553	lvs				
285								
286		<u>Internal doors</u>	553	EA	1,551.88		\$858,188	
287		HM door, frame and hardware	63	EA	\$1,113.11	\$70,126		
288		Wood door HM frame and hardware	490	EA	\$1,257.60	\$616,225		
289		premium for partly glazed doors	160	EA	\$74.92	\$11,987		
290		premium for panic bolt hardware	40	LOC	\$936.51	\$37,461		
291		Servery coiling door - 24 x 10'	1	EA	\$16,696.68	\$16,697		
292		Misc Interior Coiling doors, grilles and fire shutters - various sizes	10	EA	\$6,956.95	\$69,570		
291		Access doors	150	EA	\$240.82	\$36,123		
292		TOTAL SYSTEM C10 INTERIOR CONSTRUCTION						\$5,462,756
293								
294	C20	STAIRCASES						
295								
296	2010	Construction	21	FLT	18,679.28		\$392,265	
297		Egress staircase, incl railings	17	FLT	\$14,984.20	\$254,731		
298		Egress Staircase ,ST7	3	FLT	\$26,757.50	\$80,273		
299		Lobby Staircase	1	FLT	\$42,812.00	\$42,812		
300		Roof ladders	2	EA	\$2,675.75	\$5,352		
301		Access stair to roof	1	FLT	\$9,097.55	\$9,098		
302								
303	2020	Finish					\$66,623	
304		Rubber tile finish to egress stair	5,660	SF	\$8.83	\$49,978		
305		Pre-manufactured aggregate treads to Lobby stair	486	SF	\$34.25	\$16,645		
306		TOTAL C20 STAIRCASES						\$458,888

	SYS	DESCRIPTION	QTY	UNIT	UNIT COST \$	EST'D COST \$	SUB TOTAL \$	TOTAL COST \$
307								
308	C30	INTERIOR FINISHES						
309								
310	C3010	WALL FINISHES	280,000	SF	5.09		\$1,424,955	
311		Wood wall panelling in Lobby and Library	4,500	SF	\$36.39	\$163,756		
312		Ventwood acoustical wall panelling allowance (auditorium)	2,000	SF	\$48.16	\$96,327		
313		Column covers in cafeteria	10	EA	\$2,568.72	\$25,687		
314		Intumescent paint	1,750	SF	\$14.98	\$26,222		
315		Ceramic wall tiling	10,000	SF	\$16.05	\$160,545		
316		Porcelain wall tiling - 6ft high in corridors	21,720	SF	\$16.59	\$360,327		
317		Tectum acoustical wall panels	14,000	SF	\$11.77	\$164,826		
318		Fabric wrapped acoustical wall panels	6,000	SF	\$19.27	\$115,592		
319		Paint finish to walls	448,000	SF	\$0.70	\$311,671		
320								
321	C3020	FLOOR FINISHES	261,118	SF	5.78		\$1,510,492	
322		Carpet; average cost	28,488	SF	\$3.59	\$102,144		
323		VCT	141,000	SF	\$3.05	\$430,100		
324		Non slip floor to locker rooms and showers	6,568	SF	\$7.71	\$50,614		
325		Non slip floor to landings	6,880	SF	\$7.71	\$53,018		
326		Poured epoxy flooring kitchen	3,232	SF	\$10.17	\$32,862		
327		Vinyl base	1	LS	\$42,812.00	\$42,812		
328		Ceramic tile, incl base	9,500	SF	\$13.65	\$129,640		
329		Porcelain tile, lobbies, cafeteria, servery	14,834	SF	\$16.05	\$238,152		
330		Mondo flooring, fitness room	6,363	SF	\$13.11	\$83,426		
331		Wood floor to Gym	17,293	SF	\$16.05	\$277,630		
332		Stage floor (sprung floor)	2,364	SF	\$24.08	\$56,929		
333		Sealed concrete	24,595	SF	\$0.54	\$13,162		
334								
335	C3030	CEILING FINISHES	264,600	SF			\$1,447,495	
336		<i>Ceilings</i>						
337		ACT ceilings, 2 x 2	185,900	SF	\$4.07	\$756,081		
338		Wood ceiling panels Auditorium	7,600	SF	\$19.27	\$146,417		
339		Isolated ceiling construction allowance	8,000	SF	\$17.12	\$136,998		
340		GWB ceilings , incl allowance for soffits and fascias	30,000	SF	\$11.24	\$337,145		
341		No ceiling finish, paint only	33,100	SF	\$2.14	\$70,854		
342								
343		TOTAL SYSTEM C30 INTERIOR FINISHES						\$4,382,941
344								
345	D10	CONVEYING SYSTEMS						
346								
347	D1010	ELEVATOR	1	EA	343,566		\$343,566	
348		Passenger Elevator (1011)						
349		Hydraulic passenger elevator serving all floors 3500#	1	EA	\$144,490.50	\$144,491		
350		Hydraulic freight elevator serving all floors, 5000#	1	EA	\$171,248.00	\$171,248		
351		Misc metals	2	SETS	\$6,421.80	\$12,844		
352		Wheelchair lift	1	EA	\$14,984.20	\$14,984		
353								
354		TOTAL SYSTEM D10 CONVEYING SYSTEMS						\$343,566
355								

	SYS	DESCRIPTION	QTY	UNIT	UNIT COST \$	EST'D COST \$	SUB TOTAL \$	TOTAL COST \$
356	D15	MECHANICAL						
357								
358	D20	PLUMBING	280,000	SF	8.81		\$2,465,632	
359								
360		Water Heater	2	EA	\$35,319.90	\$70,640		
361		Water Heaters (science room)	1	EA	\$4,548.78	\$4,549		
362		Circulating Pumps	3	EA	\$909.76	\$2,729		
363		Water Service w/ meter	1	EA	\$6,956.95	\$6,957		
364		Compressed Air System	1	EA	\$16,054.50	\$16,055		
365		Grease Traps	2	EA	\$8,027.25	\$16,055		
366		Acid Neutralization Tank	1	EA	\$32,109.00	\$32,109		
367		Mixing Valves (for emergency shower)	12	EA	\$1,337.88	\$16,055		
368		Emergency Shut-off Valve	12	EA	\$1,605.45	\$19,265		
369		Rainwater Harvesting system complete	1	LS		incl elsewh		
370		Backflow Preventer	1	LS	\$6,421.80	\$6,422		
371		Whirlpool (fixture by others)	1	EA	\$2,140.60	\$2,141		
372		Elevator Sump Pump	2	EA	\$2,408.18	\$4,816		
373		Fixtures:						
374		Water closet P-1	77	EA	\$5,030.41	\$387,342		
375		premium cost for Water closet P-2 dual flush	57	EA	\$535.15	incl elsewh		
376		Urinal P-2	24	EA	\$5,030.41	\$120,730		
377		Lavatory, wall P-3	67	EA	\$5,030.41	\$337,037		
378		Mop sink P-4	6	EA	\$5,030.41	\$30,182		
379		Water Cooler P-5	12	EA	\$5,565.56	\$66,787		
380		Water fountain + cuspidores	2	EA	\$4,468.50	\$8,937		
381		Classroom Sinks	12	EA	\$5,030.41	\$60,365		
382		Washfountain	1	EA	\$7,492.10	\$7,492		
383		Cup Sink	6	EA	\$5,030.41	\$30,182		
384		Nurses Room sink	1	EA	\$5,030.41	\$5,030		
385		Showers (single)	10	EA	\$5,779.62	\$57,796		
386		Art Room sinks w/ traps	9	EA	\$5,351.50	\$48,164		
387		Science Sink (epoxy sink by others)	54	EA	\$1,873.03	\$101,143		
388		Gas Turret	48	EA	\$1,337.88	\$64,218		
389		Emergency Shower P-11	14	EA	\$4,816.35	\$67,429		
390		Eye-wash stations	6	EA	\$2,756.02	\$16,536		
391		Washer Machine hook-up P-12	2	EA	\$1,605.45	\$3,211		
392		Fume Hoods - double sided	12	EA	\$1,284.36	\$15,412		
393		Hose bibbs HB	16	EA	\$695.70	\$11,131		
394		WH	18	EA	\$1,016.79	\$18,302		
395		Floor Drains:						
396		- FD-A (bathrooms)	16	EA	\$802.73	\$12,844		
397		- FD-B (mechanical room, kitchen & shops)	25	EA	\$1,284.36	\$32,109		
398		Roof Drains						
399		- 8" RD	2	EA	\$1,048.89	\$2,098		
400		- 6" RD	18	EA	\$834.83	\$15,027		
401		- 4" RD	1	EA	\$695.70	\$696		
402		Storm Piping below grade:						
403		- 15"	240	LF	\$208.71	\$50,090		
404		- 12"	120	LF	\$155.19	\$18,623		
405		- 10"	130	LF	\$103.34	\$13,434		
406		- 8"	360	LF	\$83.48	\$30,054		
407		- 6"	250	LF	\$65.66	\$16,416		
408		Storm Piping above grade:						
409		- 8"	282	LF	\$87.76	\$24,750		

	SYS	DESCRIPTION	QTY	UNIT	UNIT COST \$	EST'D COST \$	SUB TOTAL \$	TOTAL COST \$
410		- 6"	1,080	LF	\$69.57	\$75,135		
411		- 4'	90	LF	\$51.96	\$4,677		
412		Storm Piping Insulation	1	LS	\$13,378.75	\$13,379		
413		Acid Waste above grade:						
414		- 4"	425	LF	\$41.26	\$17,536		
415		- 2"	475	LF	\$29.49	\$14,006		
416		4" VTR	2	EA	\$347.85	\$696		
417		PC Water piping: - 2"	540	LF	\$34.73	\$18,755		
418		- Branch	2,150	LF	\$24.24	\$52,121		
419		Insulate PC Water piping:			\$0.00			
420		- 2"	540	LF	\$10.65	\$5,751		
421		- Branch	2,150	LF	\$8.08	\$17,374		
422		Gas piping:						
423		- 6"	280	LF	\$112.65	\$31,542		
424		- 4"	170	LF	\$73.85	\$12,555		
425		- 2-1/2"	80	LF	\$57.80	\$4,624		
426		- 2"	750	LF	\$30.66	\$22,998		
427		- 1-1/2"	240	LF	\$26.28	\$6,306		
428		- Branch	1,500	LF	\$21.99	\$32,992		
429		Seismic Restraints	1	LOT	\$17,124.80	\$17,125		
430		Valves and specialties	1	LOT	\$26,757.50	\$26,758		
431		Cutting & Coring	1	LOT	\$13,378.75	\$13,379		
432		Lift	1	LOT	\$37,460.50	\$37,461		
433		Kitchen	1	LOT	\$123,084.50	\$123,085		
434		Test and sterilize	1	LOT	\$17,659.95	\$17,660		
435		Permits & fees	1	LOT	\$12,308.45	by Owner		
436		Shop drawings	1	LOT	\$28,362.95	\$28,363		
437								
438	D30	HVAC	280,000	SF	29.63		\$8,297,489	
439		Boilers:						
440		- B-1 & 2 2,000 MBH condenser	2	EA	\$51,374.40	\$102,749		
441		- B-3 & 4 3,500 MBH	2	EA	\$112,381.50	\$224,763		
442		Wells 1,500 Ft.	2	EA	\$42,812.00	\$85,624		
443		Heat Pumps						
444		- HP- 20 ton	1	EA	\$37,460.50	\$37,461		
445		Plate Heat Exchanger:						
446		- HX	1	EA	\$37,460.50	\$37,461		
447		Expansion Tanks	2	EA	\$12,843.60	\$25,687		
448		Air Separators	2	EA	\$5,886.65	\$11,773		
449		Pumps						
450		- CWP-1 & 2 680 GPM	2	EA	\$6,261.26	\$12,523		
451		- SCWP-1 & 2 680 GPM	3	EA	\$6,261.26	\$18,784		
452		- HWP-1 & 2 135 GPM	2	EA	\$2,729.27	\$5,459		
453		- HWP-1 & 2 240 GPM	2	EA	\$4,227.69	\$8,455		
454		- SHWP-1,2 & 3 240 GPM	3	EA	\$4,227.69	\$12,683		
455		Kitchen Make-Up Unit:						
456		- MAU-1 13,500 CFM	1	EA	\$37,460.50	\$37,461		
457		Split Systems	1	LS	\$32,109.00	\$32,109		
458		Air Handling Units:						
459		- AHU 200,000 CFM	1	LS	\$936,512.50	\$936,513		
460		Energy Recovery Units:						
461		- ERU 30,000 CFM (no cooling)	1	LS	\$80,272.50	\$80,273		
462		Rotary Screw Chiller:						
463		- CH-1 & 2 340 ton	2	EA	\$181,951.00	\$363,902		
464		Exhaust Fans	1	EA	\$101,250.38	\$101,250		
465		Smoke Exhaust 225,000 CFM	-	LS	N/A			

SYS	DESCRIPTION	QTY	UNIT	UNIT COST \$	EST'D COST \$	SUB TOTAL \$	TOTAL COST \$
466	Dust Collection	1	LS	\$53,515.00	\$53,515		
467	Unit & Convector Heaters:	40	EA	\$2,622.24	\$104,889		
468	Fin-tube Radiators						
469	- Ft	850	LF	\$85.62	\$72,780		
470	Radiant Ceiling Panels:						
471	- RHP-1	850	LF	\$117.73	\$100,073		
472	VAV Boxes	95	EA	\$2,247.63	\$213,525		
473	Registers & Diffusers:	1	LS	\$115,057.25	\$115,057		
474	Volume Dampers	1	LS	\$23,011.45	\$23,011		
475	Fire Dampers	1	LS	\$18,409.16	\$18,409		
476	Hot and chilled Water Piping:	1	LS	\$1,410,120	\$1,410,120		
477	Hot Water Piping Insulation:	1	LS	\$481,635.00	\$481,635		
478	Duct galvanized	285,000	LBS	\$10.70	\$3,050,355		
479	Duct Insulation	95,000	SF	\$2.78	\$264,364		
480	Duct lining	8,500	SF	\$2.57	\$21,834		
481	Duct dishwasher fume hoods s/s	6,500	LBS	\$21.41	\$139,139		
482	Duct steel	1,600	LBS	\$17.66	\$28,256		
483	Seal Ductwork	11,500	LF	\$1.18	\$13,539		
484	Sound Attenuators	1	LS	\$80,272.50	\$80,273		
485	Misc. Valves & specialties	1	LS	\$50,625.19	\$50,625		
486	Equipment Hook-ups						
487	- 10" Pumps	5	EA	\$41,206.55	\$206,033		
488	- 8" Pumps	5	EA	\$33,714.45	\$168,572		
489	- 5" Pumps	2	EA	\$22,476.30	\$44,953		
490	- 10" Chiller	2	EA	\$26,222.35	\$52,445		
491	- 6" Boilers	2	EA	\$8,027.25	\$16,055		
492	- 3" Boilers	2	EA	\$5,137.44	\$10,275		
493	Variable Frequency Drives:	1	LS	\$80,272.50	\$80,273		
494	Underground Piping:						
495	- 3"	400	LF	\$85.62	\$34,250		
496	Coring & sleeves	1	LS	\$9,097.55	\$9,098		
497	Controls	1	LS	\$955,242.75	\$955,243		
498	Flue	1	LS	\$21,406.00	\$21,406		
499	Seismic Restraints	1	LOT	\$18,195.10	\$18,195		
500	Testing & Balancing	1	LS	\$68,231.63	\$68,232		
501	Rigging & Lifting	1	LS	\$40,938.98	\$40,939		
502	Shop Drawing	1	LS	\$29,567.04	\$29,567		
503	Less cost difference between 100% cooling design and 25% cooling design	(1)	LS	\$1,621,383	(\$1,621,383)		
504	Less cost of Geothermal system	(1)	LS	\$212,990	(\$212,990)		
505	Displacement ventilation system to certain locations				incl elsewh		
506							
507	D40 FIRE PROTECTION	280,000	SF	5.22		\$1,462,533	
508	Sprinkler Coverage	280,000	SF	\$4.12	\$1,153,783		
509	8" Alarm Valve w/ trim	1	EA	\$5,565.56	\$5,566		
510	8" Backflow Preventer	1	EA	\$10,488.94	\$10,489		
511	8" Water Service	1	EA	\$4,120.66	\$4,121		
512	Roof Hydrant w/ post indicator valve	1	EA	\$3,478.48	\$3,478		
513	Zone control w/ standpipe	15	EA	\$3,157.39	\$47,361		
514	FDVC w/ standpipe	28	EA	\$1,980.06	\$55,442		
515	FDVC @ Auditorium	4	EA	\$1,980.06	\$7,920		
516	6" OS&Y w/ tamper switch	8	EA	\$909.76	\$7,278		
517	Pumper connection	2	EA	\$2,675.75	\$5,352		
518	Main piping:						
519	- 8"	670	LF	\$90.98	\$60,954		
520	- 6"	540	LF	\$58.87	\$31,788		
521	- 4"	160	LF	\$44.95	\$7,192		

SYS	DESCRIPTION	QTY	UNIT	UNIT COST \$	EST'D COST \$	SUB TOTAL \$	TOTAL COST \$
522	Seismic Restraints	1	EA	\$10,970.58	\$10,971		
523	Shop drawings/hydraulic calculations	1	LS	\$33,179.30	\$33,179		
524	Permits & Fees	1	LS	\$8,562.40	by Owner		
525	Lifts	1	LS	\$17,659.95	\$17,660		
526							
527	TOTAL SYSTEM D15 MECHANICAL						\$12,225,654
528							
529							
530	D50 ELECTRICAL						
531							
532	D5011 SERVICE & DISTRIBUTION	280,000	SF	5.42		\$1,518,482	
533	<i>Gear & Distribution</i>						
534	Normal Power						
535	Meter sockets	1	EA	\$374.61	\$375		
536	4000A 277/480V main switchboard	1	EA	\$90,975.50	\$90,976		
537	400A 480/277V double tub panelboard	1	EA	\$10,703.00	\$10,703		
538	400A 480/277V panelboard	1	EA	\$5,351.50	\$5,352		
539	225A 480/277V distribution panelboard	8	EA	\$5,351.50	\$42,812		
540	225A 480/277V panelboard	4	EA	\$2,675.75	\$10,703		
541	100A 480/277V panelboard	10	EA	\$2,140.60	\$21,406		
542	112.5KVA dry type transformer	2	EA	\$13,517.89	\$27,036		
543	75KVA dry type transformer	6	EA	\$8,990.52	\$53,943		
544	45KVA dry type transformer	5	EA	\$2,665.05	\$13,325		
545	400A 208/120V double tub panelboard	5	EA	\$10,167.85	\$50,839		
546	400A 208/120V panelboard	1	EA	\$4,281.20	\$4,281		
547	225A 208/120V double tub panelboard	2	EA	\$4,816.35	\$9,633		
548	225A 208/120V panelboard	4	EA	\$2,354.66	\$9,419		
549	150A 208/120V panelboard	1	EA	\$2,140.60	\$2,141		
550	100A 208/120V panelboard	1	EA	\$1,873.03	\$1,873		
551	TVSS	8	EA	\$374.61	\$2,997		
552	Normal power feeder allowance	280,000	SQ FT	\$1.87	\$524,447		
553	Grounding and bonding	1	LS	\$10,703.00	\$10,703		
554							
555	Generator Power						
556	700KW diesel fueled generator set with controls in weather proof and soundproof enclosure	1	LS	\$278,278.00	\$278,278		
557	600A 3 pole automatic transfer switch	1	EA	\$12,982.74	\$12,983		
558	400A 3 pole automatic transfer switch	1	EA	\$9,579.19	\$9,579		
559	150A 3 pole automatic transfer switch	1	EA	\$6,421.80	\$6,422		
560	600A 480/277V distribution panelboard	1	EA	\$8,562.40	\$8,562		
561	400A 480/277V distribution panelboard	1	EA	\$6,421.80	\$6,422		
562	400A 480/277V panelboard	1	EA	\$5,351.50	\$5,352		
563	225A 480/277V distribution panelboard	1	EA	\$5,351.50	\$5,352		
564	100A 480/277V panelboard	7	EA	\$2,140.60	\$14,984		
565	30KVA dry type transformer	3	EA	\$2,220.87	\$6,663		
566	100A 208/120V panelboard	4	EA	\$1,873.03	\$7,492		
567	Emergency power feeder allowance	280,000	SQ FT	\$0.80	\$224,763		
568	Less - difference in cost between the above, and a 350KW generator inc feed	(1)	LS	\$296,548.92	(\$296,549)		
569	Less - difference in cost between the 100% air conditioning and 25% air conditioning systems (electrical content)	(1)	LS	\$32,109.00	(\$32,109)		
570	<i>Photovoltaic System</i>						
571	40kw Photovoltaic array, inclusive	1	LS		incl elsewh		
572							

	SYS	DESCRIPTION	QTY	UNIT	UNIT COST \$	EST'D COST \$	SUB TOTAL \$	TOTAL COST \$
573		<i>Equipment Wiring</i>						
574		Elevator cab light feed and connection	2	EA	\$1,016.79	\$2,034		
575		Elevator feed and connection	2	EA	\$6,956.95	\$13,914		
576		Jockey pump feed and connection	1	EA	\$1,605.45	\$1,605		
577		Kitchen equipment wiring	1	LS	\$53,515.00	\$53,515		
578		Kiln feed and connection, allow 60A	1	EA	\$1,605.45	\$1,605		
579		Shop equipment wiring allowance	3	EA	\$6,956.95	\$20,871		
580		Heat trace feeds and connections	1	LS	\$1,605.45	\$1,605		
581		Boiler feed, connection, & safety switch	4	EA	\$1,284.36	\$5,137		
582		Primary pump feed, connection, & safety switch	2	EA	\$1,284.36	\$2,569		
583		Secondary loop pump feed, connection, safety switch, & connection to VFD	3	EA	\$1,926.54	\$5,780		
584		In line pump feed, connection, & safety switch	2	EA	\$1,284.36	\$2,569		
585		Kitchen MAU feed, connection, & safety switch WP	1	EA	\$2,354.66	\$2,355		
586		Fume hood feed and connection	12	EA	\$481.64	\$5,780		
587		End suction pump feed, connection, & safety switch	2	EA	\$1,284.36	\$2,569		
588		Chiller feed, connection, & safety switch WP	2	EA	\$5,351.50	\$10,703		
589		Chiller pump feed, connection, & safety switch	2	EA	\$1,605.45	\$3,211		
590		Chiller secondary loop pump feed, connection, safety switch, & connection to VFD	3	EA	\$2,354.66	\$7,064		
591		Chiller end suction pump feed, connection, & safety switch	2	EA	\$1,605.45	\$3,211		
592		Water source heat pump feed, connection, & safety switch	2	EA	\$1,605.45	\$3,211		
593		BMS feeds and connections	1	LS	\$1,605.45	\$1,605		
594		AHU SF feed, connection, safety switch, & connect to VFD	6	EA	\$2,675.75	\$16,055		
595		AHU RF feed, connection, safety switch, & connection to VFD	6	EA	\$2,675.75	\$16,055		
596		Gym AHU feed, connection, & safety switch WP	1	EA	\$2,354.66	\$2,355		
597		Special system EF feed, connection, & safety switch	20	EA	\$1,605.45	\$32,109		
598		Equipment wiring allowance	280,000	SQ FT	\$0.54	\$149,842		
599								
600	D5021	LIGHTING & POWER	280,000	SF	9.95		\$2,787,061	
601		<i>Lighting & Branch Power</i>						
602		Lighting fixture allowance	280,000	SQ FT	\$4.82	\$1,348,578		
603		Lighting control allowance	280,000	SQ FT	\$0.86	\$239,747		
604		Small power device allowance	280,000	SQ FT	\$0.43	\$119,874		
605		Device box and wiring allowance	280,000	SQ FT	\$3.85	\$1,078,862		
606								
607	D5031	SPECIAL SYSTEMS	280,000	SF	9.29		\$2,600,321	
608		<i>Fire Alarm</i>						
609		Fire alarm control panel	1	EA	\$26,757.50	\$26,758		
610		Fire alarm remote annunciator (LCD)	2	EA	\$1,337.88	\$2,676		
611		Plan cabinet	4	EA	\$802.73	\$3,211		
612		Master box	1	EA	\$3,746.05	\$3,746		
613		Exterior beacon	2	EA	\$160.55	\$321		
614		Knox box	1	EA	\$642.18	\$642		
615		Drill switch	1	EA	\$187.30	\$187		
616		Elevator connection	2	EA	\$160.55	\$321		
617		Kitchen fire suppression connection	1	EA	\$160.55	\$161		
618		Fire alarm device	280,000	SQ FT	\$1.34	\$374,605		
619		Circuitry and testing	1	LS	\$7,492.10	\$7,492		
620								
621		<i>Telephone/Data/CATV</i>						
622		Rough In allowance	280,000	SQ FT	\$0.70	\$194,795		
623		4" conduit sleeve	60	EA	\$267.58	\$16,055		
624		Closet back board	5	EA	\$374.61	\$1,873		

	SYS	DESCRIPTION	QTY	UNIT	UNIT COST \$	EST'D COST \$	SUB TOTAL \$	TOTAL COST \$
625		Closet grounding	5	EA	\$535.15	\$2,676		
626		Devices and cabling allowance	280,000	SQ FT	\$1.34	\$374,605		
627		MDF	1	EA	\$5,351.50	\$5,352		
628		IDF	4	EA	\$2,140.60	\$8,562		
629								
630		<i>Public Address/Master clock system</i>						
631		Public Address/Master clock system	280,000	SQ FT	\$0.54	\$149,842		
632		Rough-in	280,000	SQ FT	\$0.32	\$89,905		
633								
634		<i>Audio/Visual</i>						
635		Audio/visual systems allowance	280,000	SQ FT	\$0.54	\$149,842		
636		Broad cast studio rough-in, allow	1	LS	\$53,515.00	\$53,515		
637		Auditorium: Sound system rough-in, allow	1	LS	\$42,812.00	\$42,812		
638		Gymnasium: Sound system rough-in, allow	1	LS	\$10,703.00	\$10,703		
639		Drama Room: Sound system rough-in, allow	1	LS	\$10,703.00	\$10,703		
640		Band Room: Sound system rough-in, allow	1	LS	\$8,027.25	\$8,027		
641		Chorus Room: Sound system rough-in, allow	1	LS	\$8,027.25	\$8,027		
642		Ensemble Room: Sound system rough-in, allow	1	LS	\$8,027.25	\$8,027		
643		TV Studio: Sound system rough-in, allow	1	LS	\$21,406.00	\$21,406		
644		Fitness center: Sound system rough-in, allow	1	LS	\$21,406.00	\$21,406		
645		Wrestling: Sound system rough-in, allow	1	LS	\$8,027.25	\$8,027		
646		Dance Room: Sound system rough-in, allow	1	LS	\$10,703.00	\$10,703		
647		Cafeteria: Sound system rough-in, allow	1	LS	\$10,703.00	\$10,703		
648		Motorized projection screen feed, connection, & control switch	8	EA	\$802.73	\$6,422		
649		Projector ceiling power	8	EA	\$267.58	\$2,141		
650								
651		<i>Gymnasium</i>						
652		Scoreboard with controls and shot clock	1	EA	\$12,843.60	\$12,844		
653		Motorized backboard	8	EA	\$1,337.88	\$10,703		
654		Motorized curtain	2	EA	\$1,337.88	\$2,676		
655		Motorized bleachers	1	EA	\$1,337.88	\$1,338		
656		Gymnasium equipment allowance	1	LS	\$5,351.50	\$5,352		
657								
658		<i>Auditorium</i>						
659		Theatrical lighting equipment, allow	1	LS	\$225,298.15	incl elsewh		
660		Installation and wiring for lighting, allow	1	LS	\$85,624.00	\$85,624		
661		Auditorium sound system, allow	1	LS	\$64,218.00	\$64,218		
662		Motorized movie screen	1	EA	\$695.70	\$696		
663		Lift feed and connection w/FSS	2	EA	\$1,070.30	\$2,141		
664		Fire curtain feed and connection	1	EA	\$909.76	\$910		
665								
666		<i>Drama Room</i>						
667		Theatrical lighting equipment, allow	1	LS	\$90,975.50	incl elsewh		
668		Installation and wiring for lighting, allow	1	LS	\$48,163.50	\$48,164		
669		Sound system, allow	1	LS	\$37,460.50	\$37,461		
670								
671		<i>Security System</i>						
672		Access Control System:						
673		Access control head end	1	LS	\$21,406.00	\$21,406		
674		etc), allowance	100	EA	\$214.06	\$21,406		
675		Door junction box, allow	70	EA	\$267.58	\$18,730		
676		Device box with 1/2" conduit to door junction box	100	EA	\$107.03	\$10,703		
677		3/4" EMT	7,000	LF	\$6.42	\$44,953		
678		Security cabling	8,000	LF	\$1.07	\$8,562		

	SYS	DESCRIPTION	QTY	UNIT	UNIT COST \$	EST'D COST \$	SUB TOTAL \$	TOTAL COST \$
679		CCTV System:						
680		Head-end	1	LS	\$21,406.00	\$21,406		
681		CCTV camera	55	EA	\$1,605.45	\$88,300		
682		CCTV camera, WP	15	EA	\$3,210.90	\$48,164		
683		Device box with conduit to ceiling	70	EA	\$160.55	\$11,238		
684		3/4" EMT	7,000	LF	\$6.42	\$44,953		
685		CCTV cabling	7,000	LF	\$1.07	\$7,492		
686								
687		<i>Lightning Protection</i>						
688		Lightning protection	280,000	SQ FT	\$0.54	\$149,842		
689								
690		<i>Reimbursable</i>						
691		Fees & Permits	1	LS	\$74,921.00	by Owner		
692		Temp power & lights	280,000	SQ FT	\$0.70	\$194,795		
693								
694		TOTAL SYSTEM D50 ELECTRICAL						\$6,905,864
695								
696	E10	EQUIPMENT						
697								
698	1020	INSTITUTIONAL EQUIPMENT	280,000	SF	12.67		\$3,546,486	
699		Display equipment						
700		12' screen at café	2	EA	\$3,317.93	\$6,636		
701		Multipurpose and Library screens	2	EA	\$1,926.54	\$3,853		
702		16' screen at Auditorium (electric operation)	1	EA	\$5,886.65	\$5,887		
703		Manual projection screens	102	EA	\$481.64	\$49,127		
704		4 x 8' markerboards 3 per class	306	EA	\$436.68	\$133,625		
705		8 x 4' Markerboard with sliding panels; 2 per lab	12	SETS	\$2,461.69	\$29,540		
706		Markerboard allowance for other locations	2,000	SF	\$13.65	\$27,293		
707		4 x 4' Tackboards, 2 per class	204	EA	\$205.50	\$41,922		
708		Tackboard allowance for other locations	3,000	SF	\$12.84	\$38,531		
709		Tack strip, 40 LF per classroom	8,160	LF	\$5.35	\$43,668		
710		Library built in shelving	1	LS	\$21,406.00	\$21,406		
711		Kitchen equipment allowance from Tavares Design	1	LS	\$481,635.00	\$481,635		
712		Servery casework	1	LS	\$16,054.50	\$16,055		
713		Stainless steel corner guards	225	LF	\$18.20	\$4,094		
714		Toilet compartment	35	EA	\$1,097.06	\$38,397		
715		Toilet compartment ADA	18	EA	\$1,369.98	\$24,660		
716		Urinal screen	20	EA	\$406.71	\$8,134		
717		Shower compartment	8	EA	\$1,605.45	\$12,844		
718		Shower compartment ADA	4	EA	\$1,605.45	\$6,422		
719		Cubicles and curtain tracks	1	LS	\$7,492.10	\$7,492		
720		Restroom accessories (gang)	16	LOC	\$3,210.90	\$51,374		
721		Restroom accessories (single user + ADA)	26	LOC	\$428.12	\$11,131		
722		Paper towel and soap dispensers at classroom and lab sinks, allowance	50	LOC	\$294.33	\$14,717		
723		Sports lockers, 2 tier	200	EA	\$428.12	\$85,624		
724		Team lockers 2 tier	200	EA	\$513.74	\$102,749		
725		Lockers- corridor, 2 tier units	800	EA	\$385.31	\$308,246		
726		Mail slots	180	EA	\$44.95	\$8,091		
727		Kitchen Staff lockers	12	EA	\$256.87	\$3,082		
728		Signage allowance	280,000	SF	\$0.54	\$149,842		
729		Fire extinguishers; recessed and surface mounted	280,000	SF	\$0.11	\$29,968		
730		Folding partitions 24 x 10'	3	EA	\$14,641.70	\$43,925		
731		Folding partitions 40 x 15'	2	EA	\$36,604.26	\$73,209		
732		Loading dock (no levellers)	1	LS	\$4,816.35	\$4,816		

	SYS	DESCRIPTION	QTY	UNIT	UNIT COST \$	EST'D COST \$	SUB TOTAL \$	TOTAL COST \$
733		<u>Lab equipment</u>						
734		Goggle cabinet	12	EA	\$4,174.17	\$50,090		
735		Drying rack	36	EA	\$94.19	\$3,391		
736		First aid cabinet	18	EA	\$401.36	\$7,225		
737		Fume Hood, 4ft double sided	12	EA	\$9,953.79	\$119,445		
738		Flammable / corrosive resistant storage cabinet	6	EA	\$2,729.27	\$16,376		
739		Epoxy lab sinks	54	EA	\$2,033.57	\$109,813		
740		<u>Auditorium / Studio</u>						
741		Auditorium seating,	700	EA	\$272.93	\$191,049		
742		Wheelchair positions	20	EA	\$224.76	\$4,495		
743		Theatrical lighting	1	LS	\$225,298.15	\$225,298		
744		Theatrical rigging	1	LS	\$343,191.70	\$343,192		
745		Multi-purpose classrom theatrical lighting	1	LS	\$90,975.50	\$90,976		
746		TV studio	1	LS	\$32,109.00	\$32,109		
747		Clock - 4 dials	1	LS	\$16,054.50	\$16,055		
748		<u>Gym Equipment</u>						
749		Retractable basketball stops	8	EA	\$6,956.95	\$55,656		
750		Scoreboard and shot basic	2	SETS	\$8,027.25	\$16,055		
751		Scoreboard and shot enhanced	1	SETS	\$10,703.00	\$10,703		
752		Motorized bleachers	1,000	SEAT	\$133.79	\$133,788		
753		Gym wall pads	350	LF	\$55.66	\$19,479		
754		Climbing wall	1	LS	\$5,619.08	\$5,619		
755		Batting cage	2	EA	\$7,063.98	\$14,128		
756		Gym divider curtain	2	EA	\$23,011.45	\$46,023		
757		Wrestling mat (2) and lifting gear	1	LS	\$16,054.50	\$16,055		
758		Volleyball post inserts	4	SETS	\$2,568.72	\$10,275		
759		Centralized control system	1	LS	\$9,311.61	\$9,312		
760		Full height mirrors	400	SF	\$32.11	\$12,844		
761		Dance barre	40	LF	\$69.57	\$2,783		
762		Misc metals associated with equipment	1	LS	\$21,406.00	\$21,406		
763								
764	1090	OTHER EQUIPMENT						
765		Commerical laundry equipment	1	SET	\$5,137.44	\$5,137		
766		Residential appliances for culinary arts	1	LS	\$21,406.00	\$21,406		
767		Icemaker - athletics dept	1	EA	\$2,889.81	\$2,890		
768		Icemaker - sciance prep	3	EA	\$1,155.92	\$3,468		
769		ADA accessible revolving door to darkroom	1	EA	\$4,495.26	\$4,495		
730		Staff Kitchenette equipment	2	LOC	\$2,675.75	\$5,352		
770		Misc equipment	1	LS	\$32,109.00	\$32,109		
771								
772		TOTAL SYSTEM E10 FITTINGS & EQUIPMENT						\$3,546,486
773								

	SYS	DESCRIPTION	QTY	UNIT	UNIT COST \$	EST'D COST \$	SUB TOTAL \$	TOTAL COST \$
774	E20	FURNISHINGS						
775		SPECIALTIES / MILLWORK						
776		<u>Millwork and casework</u>	280,000	SF			\$1,681,859	
777		Typical classroom casework, comprising (per class)	90	EA	\$6,314.77	\$568,329		
778		Base units		LF				
779		Wall units	12	LF				
780		Countertop	12	LF				
781		Tall storage units	2	EA				
782		Lab class casework, comprising (per class)	12	EA	\$37,064.49	\$444,774		
783		Base units	78	LF				
784		Wall units	46	LF				
785		Countertop (epoxy)	74	LF				
786		Tall storage units	1	EA				
787		Demo bench	1	EA				
788		Prep room casework comprising (per class)	6	EA	\$14,770.14	\$88,621		
789		Base units		LF				
790		Wall units		LF				
791		Countertop (epoxy)		LF				
792		Tall storage units		EA				
793		Art class casework, comprising (per class)	1	EA	\$21,962.56	\$21,963		
794		Base units	52	LF				
795		Wall units	38	LF				
796		Countertop, epoxy coated	52	LF				
797		Tall storage units	0	EA				
798		Language Lab casework, comprising (per class)	2	EA	\$11,543.19	\$23,086		
799		Base units	11	LF				
800		Wall units	11	LF				
801		Countertop	11	LF				
802		Tall storage units	5	EA				
803		Music room casework comprising (per class)	3	EA	\$12,394.07	\$37,182		
804		Base units	13	LF				
805		Wall units	13	LF				
806		Countertop	22	LF				
807		Tall storage units	4	EA				
808		<u>Other program</u>						
809		Studio	1	EA	\$16,054.50	\$16,055		
810		Culinary Arts	1	LS	\$16,054.50	\$16,055		
811		Carpentry casework	1	LS	\$10,703.00	\$10,703		
812		Nurses office	1	LS	\$10,703.00	\$10,703		
813		Admin casework	1	LS	\$21,406.00	\$21,406		
814		Misc base unit	250	LF	\$171.25	\$42,812		
815		Misc wall unit	200	LF	\$149.84	\$29,968		
816		Miscellaneous countertop	300	LF	\$133.79	\$40,136		
817		Misc tall storage unit	30	EA	\$1,230.85	\$36,925		
818		Storage room shelving	31	LOC	\$3,210.90	by Owner		
819		Miscellaneous standing and running trim	280,000	SF	\$0.54	\$149,842		
820		Reception / circulation desks etc	50	LF	\$535.15	\$26,758		
821		Built in seating	100	LF	\$160.55	\$16,055		
822		Theatre guardrails to vomitories	80	LF	\$149.84	\$11,987		
823		Wall mounted handrails - ADA compatible	100	LF	\$96.33	\$9,633		
824		Display cases	20	EA	\$2,943.33	\$58,867		
825								

	SYS	DESCRIPTION	QTY	UNIT	UNIT COST \$	EST'D COST \$	SUB TOTAL \$	TOTAL COST \$
826		Miscellaneous					\$189,390	
827		Pedigrig entrance mat	450	SF	\$32.64	\$14,690		
828		Motorized shades in library	1,000	SF	\$19.27	\$19,265		
829		Privacy blinds allowance for interior lights and doors	2,500	SF	\$3.48	\$8,696		
830		Misc metals associated with furnshings	1	LS	\$26,757.50	\$26,758		
831		Window treatments allowance, manual mechoshades	14,800	SF	\$7.49	\$110,883		
832		Window treatments allowance, dual shades	1,000	SF	\$9.10	\$9,098		
833								
834		TOTAL SYSTEM E20 FURNISHINGS						\$1,871,248
835								
836	F10	SPECIAL CONSTRUCTION						
837							\$0	
838		No items in this section						
839								
840		TOTAL SYSTEM F10 SPECIAL CONSTRUCTION						\$0
841								
842	F20	SELECTIVE DEMOLITION						
843								
844		No items in this section						
845		TOTAL SYSTEM F20 DEMOLITION						\$0
846								
847						TOTAL TO SUMMARY		\$58,789,322

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
25% COOLING OPTION				
Boilers:				
- B-1 & 2 1,500 MBH	2	EA	\$39,306.77	\$78,614
- B-3,4 & 5 3,500 MBH condensing	2	EA	\$112,381.50	\$224,763
Wells 1,500 Ft.	2	EA	\$42,812.00	\$85,624
Heat Pumps				
- HP- 20 ton	1	EA	\$37,460.50	\$37,461
Plate Heat Exchanger:				
- HX	1	EA	\$37,460.50	\$37,461
Expansion Tanks	1	EA	\$12,843.60	\$12,844
Air Separators	1	EA	\$5,886.65	\$5,887
Pumps				
- HWP-1 & 2 100 GPM	2	EA	\$2,729.27	\$5,459
- HWP-1 & 2 240 GPM	2	EA	\$4,227.69	\$8,455
- SHWP-1,2 & 3 240 GPM	3	EA	\$4,227.69	\$12,683
Kitchen Make-Up Unit:				
- MAU-1 13,000 CFM	1	EA	\$37,460.50	\$37,461
Split Systems	1	LS	\$32,109.00	\$32,109
Rooftop Units:				
- RTU 100,000 CFM	1	LS	\$481,635.00	\$481,635
Energy Recovery Units:				
- ERU 200,000 CFM (no cooling)	1	LS	\$535,150.00	\$535,150
Exhaust Fans	1	EA	\$101,250.38	\$101,250
Smoke Exhaust 225,000 CFM	-	LS	N/A	\$0
Dust Collection	1	LS	\$53,515.00	\$53,515
Unit & Convector Heaters:	40	EA	\$2,622.24	\$104,890
Fin-tube Radiators				
- Ft	850	LF	\$85.62	\$72,777
Radiant Ceiling Panels:				
- RHP-1	850	LF	\$117.73	\$100,071
VAV Boxes	19	EA	\$2,247.63	\$42,705
Registers & Diffusers:	1	LS	\$115,053.25	\$115,053
Volume Dampers	1	LS	\$23,011.45	\$23,011
Fire Dampers	1	LS	\$18,409.10	\$18,409
Hot Water Piping: 2 pipe system	1	LS	\$1,160,120.00	\$1,160,120
Hot Water Piping Insulation:	1	LS	\$396,122.00	\$396,122
Duct galvanized	252,370	LBS	\$10.70	\$2,700,359
Duct Insulation	95,000	SF	\$2.78	\$264,100
Duct lining	8,500	SF	\$2.57	\$21,845
Duct dishwasher fume hoods s/s	6,500	LBS	\$21.41	\$139,165
Duct steel	1,600	LBS	\$17.66	\$28,256
Seal Ductwork	11,500	LF	\$1.18	\$13,570

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
Sound Attenuators	1	LS	\$80,272.50	\$80,273
Misc. Valves & specialties	1	LS	\$50,625.19	\$50,625
Equipment Hook-ups				
- 10" Pumps	5	EA	\$41,206.55	\$206,033
- 8" Pumps	1	EA	\$33,714.45	\$33,714
- 5" Pumps	2	EA	\$22,476.30	\$44,953
- 10" Chiller	-	EA	\$26,222.35	\$0
- 6" Boilers	2	EA	\$8,027.25	\$16,055
- 3" Boilers	2	EA	\$5,137.44	\$10,275
Variable Frequency Drives:	1	LS	\$40,671.40	\$40,671
Underground Piping:				
- 3"	400	LF	\$85.62	\$34,248
Coring & sleeves	1	LS	\$9,097.55	\$9,098
Controls	1	LS	\$882,997.50	\$882,998
Flue	1	LS	\$21,406.00	\$21,406
Seismic Restraints	1	LOT	\$13,913.90	\$13,914
Testing & Balancing	1	LS	\$53,515.00	\$53,515
Rigging & Lifting	1	LS	\$32,313.00	\$32,313
Shop Drawing	1	LS	\$29,567.04	\$29,567
HVAC TOTAL				\$8,510,478

100% cooling (incl cost of Geothermal component)	\$10,131,861
25% cooling (incl cost of Geothermal component)	\$8,510,478
Cost difference between 25% and 100%, before markups	\$1,621,383

SITE DEVELOPMENT SUMMARY

ELEMENT	
024113 -SELECTIVE SITE DEMOLITION	\$4,544,436
02-EXISTING CONDITIONS	\$4,544,436
265600-SITE ELECTRICAL	\$460,604
26-ELECTRICAL	\$460,604
31-20-00-EARTH MOVING	\$798,755
312500-EROSION AND SEDIMENTATION CONTROLS	\$21,406
31-EARTHWORK	\$820,161
321216-ASPHALT PAVING	\$456,401
321313-CONCRETE PAVING	\$116,663
311400-UNIT PAVERS	\$77,182
321600-CURBING	\$336,069
321700-SITE IMPROVEMENT	\$510,961
323113-FENCES AND GATES	\$33,072
328000-PLANTING IRRIGATION	\$0
329200-TURF AND GRASSES	\$104,354
329300-PLANTS	\$229,965
32-EXTERIOR IMPROVEMENT	\$1,864,667
331100-WATER UTILITY DISTRIBUTION SYSTEM	\$95,578
333100-SANITARY UTILITY SEWERAGE SYSTEM	\$142,797
334100-STORM UTILITY DRAINAGE SYSTEM	\$617,410
33-UTILITIES	\$855,785
Subtotal	\$8,545,653

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
02-EXISTING CONDITIONS				
024113 -SELECTIVE SITE DEMOLITION				
Demolish existing school complete	3,986,160	CF	\$0.64	\$2,559,832
Break out foundations and slab on grade and backfill with imported material	120,000	SF	\$2.46	\$295,403
HAZMAT abatement prior to demolition	1	LS	\$1,070,300	\$1,070,300
Site clearance generally	11	ACRE	\$8,027.25	\$88,300
Remove existing parking lot / drop off areas	148,750	SF	\$1.07	\$159,207
Demolish houses occupying site incl. foundation removal	3	EA	\$26,757.50	\$80,273
Tree removal allowance	1	LS	\$16,054.50	\$16,055
Tree salvage	1	LS	\$10,703.00	\$10,703
8' Construction fence, install & maintain	4,000	LF	\$10.70	\$42,812
Protect and maintain existing utilities	1	LS	\$53,515.00	\$53,515
Remove redundant utilities upon completion	1	LS	\$80,272.50	\$80,273
Construct. entrance-gravel bed, construct and maintain allowance	2	LS	\$5,351.50	\$10,703
Oil tank removal, incl, emptying sludge and replacement of void with clean fill. Incl. cont. soil removal	1	LS	\$23,546.60	\$23,547
Contaminated soil removal	1	LS	\$53,515.00	\$53,515
SELECTIVE SITE DEMOLITION TOTAL				\$4,544,436
31-EARTHWORK				
31-20-00-EARTH MOVING				
Cut & fill allowance	9,500	CY	\$6.42	\$61,007
Import fill to make up levels and deposit / compact (building footprint); incl removal of existing; assume 3ft av depth; allowance	10,000	CY	\$37.46	\$374,605
Rock excavation, allowance	400	CY	\$80.27	\$32,109
New gas service for school - excavate trench and backfill only	200	LF	\$42.81	\$8,562
Underground electrical ,excavate trench and backfill	1,750	LF	\$48.16	\$84,286
Gravel base to surfacing	7,948	CY	\$29.97	\$238,186
EARTH MOVING TOTAL				\$798,755
312500-EROSION AND SEDIMENTATION CONTROLS				
Hay bales and silt fence	5,000	LF	\$4.28	\$21,406
EROSION AND SEDIMENTATION CONTROLS TOTAL				\$21,406

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
26-ELECTRICAL				
265600-SITE ELECTRICAL				
Tap manhole	1	EA	\$4,816.35	\$4,816
New manhole	1	EA	\$5,886.65	\$5,887
Primary electrical service ductbank 4-4" empty conduit, feeder by Utility Co	850	LF	\$128.44	\$109,171
Transformer by WMLP	1	EA	\$0.00	NIC
Transformer pad	1	EA	\$2,675.75	\$2,676
4000A Secondary service ductbank in 10- 4" PVC empty conduit, feeder by Utility Co	60	LF	\$321.09	\$19,265
WMLP meter	2	EA		NIC
Communication riser pole	1	EA	\$909.76	\$910
Communication service ductbank 5-4" (allow length)	900	LF	\$176.60	\$158,940
Communications manhole	2	EA	\$4,816.35	\$9,633
Fire alarm cable from master box	900	LF	\$5.35	\$4,816
Site lighting fixture, base, and circuitry, allow	50	EA	\$2,889.81	\$144,491
SITE ELECTRICAL TOTAL				\$460,604
32-EXTERIOR IMPROVEMENT				
321216-ASPHALT PAVING				
Bit concrete pavement at existing pavement	1,000	SF	\$3.00	\$2,997
Bit concrete pavement	161,031	SF	\$2.46	\$396,408
Bit concrete walkway	11,191	SF	\$2.46	\$27,549
Loading dock	1,000	SF	\$3.75	\$3,746
Accessible curb cuts	25	EA	\$374.61	\$9,365
Parking stall painting, type.	375	EA	\$34.78	\$13,044
Parking stall painting, HC	11	EA	\$80.27	\$883
Painted crosswalks	3,000	SF	\$0.80	\$2,408
ASPHALT PAVING TOTAL				\$456,401
321313-CONCRETE PAVING				
Concrete walkway	20,000	SF	\$5.62	\$112,382
Concrete ramps	500	SF	\$8.56	\$4,281
CONCRETE PAVING				\$116,663
311400-UNIT PAVERS				
Precast paving surface, courtyard and entry	5,769	SF	\$13.38	\$77,182
UNIT PAVERS TOTAL				\$77,182

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
321600-CURBING				
Granite Curbing in parking lots and roadways	9,373	LF	\$35.86	\$336,069
CURBING TOTAL				\$336,069
321700-SITE IMPROVEMENT				
New handrails	250	LF	\$96.33	\$24,082
Bike racks	1	LS	\$5,351.50	\$5,352
Cast -in-place seat/ wall	200	LF	\$214.06	\$42,812
Transformer concrete pad	170	SF	\$7.49	incl
Utility concrete pad	350	SF	\$7.49	\$2,622
Masonry screen wall	1,600	SF	\$58.87	\$94,186
Pipe bollards	40	EA	\$428.12	\$17,125
Benches allowance	6	EA	\$1,284.36	\$7,706
Trash / Recycle Receptacles	10	EA	\$668.94	\$6,689
Provide school sign	1	EA	\$10,703.00	\$10,703
Feature stone wall and palisade fence	500	LF	\$401.36	\$200,681
Other signs	2	EA	\$3,746.05	\$7,492
Traffic signage allowance	20	EA	\$160.55	\$3,211
Outdoor pursuits facility	1	LS	\$80,272.50	\$80,273
Provide 40 foot high tapered anodized aluminum flagpole with internal halyard system and 8 foot by 12 foot flag.	1	EA	\$8,027.25	\$8,027
SITE IMPROVEMENTS				\$510,961
323113-FENCES AND GATES				
Decorative fencing allowance	200	LF	\$90.98	\$18,195
8' High chain link fence	50	LF	\$29.97	\$1,498
Security gate at Seaver Street	1	LS	\$13,378.75	\$13,379
CHAIN LINK FENCES AND GATES TOTAL				\$33,072
328000-PLANTING IRRIGATION				
No irrigation				
PLANTING IRRIGATION TOTAL				\$0
329200-TURF AND GRASSES				
Loam & grasses allowance	100,000	SF	\$0.91	\$90,976
Mulch allowance	1	LS	\$13,378.75	\$13,379
TURF AND GRASSES TOTAL				\$104,354

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
329300-PLANTS				
Deciduous tree planting	125	EA	\$588.67	\$73,583
Flowering trees	25	EA	\$588.67	\$14,717
Shrubs	12,500	SF	\$5.35	\$66,894
Groundcover	12,500	SF	\$3.21	\$40,136
Rain garden	6,472	SF	\$5.35	\$34,635
PLANTS TOTAL				\$229,965
33-UTILITIES				
331100-WATER UTILITY DISTRIBUTION SYSTEM				
12"x10" tapping, sleeve & valve	1	EA	\$5,351.50	\$5,352
4" C.L.D.I Water Line, trench and backfill -provided	300	LF	\$64.22	\$19,265
8" Fire water Line, trench and backfill -provied	300	LF	\$85.62	\$25,687
8" D.I.Water Gate	1	EA	\$1,070.30	\$1,070
Fire Hydrant allowance	4	EA	\$1,284.36	\$5,137
6" D.I.Water Gate allowance	4	EA	\$856.24	\$3,425
4" & 8" bend	1	EA	\$128.44	\$128
10"x8" Tee	1	EA	\$192.65	\$193
Thrust blocks	1	LS	\$3,210.90	\$3,211
Temporary dry standpipes	1	LS	\$32,109.00	\$32,109
WATER UTILITY DISTRIBUTION SYSTEM				\$95,578
333100-SANITARY UTILITY SEWERAGE SYSTEM				
Remove existing sewer line	218	LF	\$37.46	\$8,166
10" PVC pipe incl trench and backfill	671	LF	\$51.37	\$34,472
8" PVC pipe incl trench and backfill	110	LF	\$42.81	\$4,709
Grease trap	1	EA	\$6,421.80	\$6,422
Sewer Manhole	4	EA	\$3,210.90	\$12,844
Connect to existing Manhole	3	EA	\$1,605.45	\$4,816
Oil/Water separator	1	EA	\$5,351.50	\$5,352
Tem. 6" PVC pipe incl trench and backfill	160	LF	\$37.46	\$5,994
Tem Sewer Manhole	9	EA	\$3,210.90	\$28,898
Tem. Oil/Water separator	1	EA	\$5,351.50	\$5,352
Tem.8" PVC pipe incl trench and backfill	602	LF	\$42.81	\$25,773
SANITARY UTILITY SEWERAGE SYSTEM TOTAL				\$142,797

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
334100-STORM UTILITY DRAINAGE SYSTEM				
Connect to existing Manhole in street	3	EA	\$6,421.80	\$19,265
Catch basin	34	EA	\$2,354.66	\$80,058
Storm manhole	20	EA	\$3,210.90	\$64,218
Stormceptor (STC)	3	EA	\$21,406.00	\$64,218
12" CPE Drainage pipe	2,793	LF	\$39.60	\$110,606
15" CPE Drainage pipe	679	LF	\$43.88	\$29,796
Trench Drain	56	LF	\$69.57	\$3,896
Foundation drain	646	LF	\$42.81	incl in bldg
8" PVC Roof drain	310	LF	\$48.16	\$14,931
FES	3	EA	\$856.24	\$2,569
Rain water tanks:100,000 gallon	1	LS	\$0.00	incl elsew
Excavate and remove / backfill	459	CY	\$26.76	\$12,279
36" French drainpipe	825	LF	\$69.57	\$57,395
Gravel bed and surround	115	CY	\$32.11	\$3,684
Tem. DMH	6	EA	\$2,140.60	\$12,844
Replace DMH	1	EA	\$2,140.60	\$2,141
Tem. 15" CPE Drain	273	LF	\$43.88	\$11,980
Tem. 18" CPE Drain	199	LF	\$48.16	\$9,585
Tem. 24" CPE Drain	204	LF	\$53.52	\$10,917
Recharge system allowance	1	LS	\$107,030.00	\$107,030
STORM UTILITY DRAINAGE SYSTEM TOTAL				\$617,410