



**PM&C LLC**  
20 Downer Avenue, Suite 5  
Hingham, MA 02043  
(T) 781-740-8007  
(F) 781-740-1012

## **PSR Options Cost Estimate**

### **Lexington High School**

Town of Lexington, MA

Prepared for:

**Dore + Whittier**

October 7, 2024



**Lexington High School**  
Town of Lexington, MA

7-Oct-24

## **PSR Options Cost Estimate**

## **INTRODUCTION**

**NOTE: The costs for the various PSR Options indicated above are intended to be an analysis of the relative costs between options and NOT a prediction of the actual final cost of any individual option. Major variables such as geotechnical, site grading, structural system and final MEP systems have yet to be designed and costs will vary significantly from the benchmark cost estimating included as part of this PSR cost analysis. The costs outlined in this report should not be represented as the FINAL construction budget.**

This PSR Design Submission cost estimate was produced from narratives and outline drawings dated September 27th, 2024 prepared by SMMA and their design team.

This estimate includes all direct construction costs, Construction Managers fee 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
- Rock excavation other than allowances included in estimate
- 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. fixtures, furniture and equipment)
- Utility company back charges, including work required off-site
- Work to City streets and sidewalks, (except as noted in this estimate)



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PSR PRICING OPTIONS

MAIN CONSTRUCTION COST SUMMARY

	Gross Floor Area	\$/sf	Estimated Construction Cost
<b>OPTION A.1 - Base Repair/Code Update</b>	352,000	\$654.34	<b>\$230,327,240</b>
<b>OPTION B.1 - Add/Reno Quad</b>	440,816	\$1,118.64	<b>\$493,113,002</b>
<b>OPTION B.4 - Add/Reno Figure Eight</b>	440,816	\$1,116.74	<b>\$492,275,055</b>
<b>OPTION C1d - New Construction Branch</b>	440,816	\$1,074.91	<b>\$473,839,290</b>
<b>OPTION C2b - New Construction Braid</b>	440,816	\$1,062.07	<b>\$468,179,460</b>
<b>OPTION C5b - New Construction Bloom</b>	440,816	\$1,078.95	<b>\$475,619,351</b>
<b>OPTION D.2 - New Construction Phased in Place</b>	440,816	\$1,143.01	<b>\$503,855,866</b>
<b>Breakout/Alternate Pricing (Includes all markups)</b>			
F.1 New FH OPTION 1	36,000	\$854.49	<b>\$30,761,771</b>
F.2 New FH OPTION 2	72,000	\$788.95	<b>\$56,804,589</b>
G.1 Add/Reno FH OPTION 3	48,000	\$700.08	<b>\$33,604,013</b>
F.3 New FH OPTION 4	60,000	\$809.93	<b>\$48,596,066</b>
G.0 Renovate FH OPTION 5	34,000	\$644.65	<b>\$21,918,092</b>
G.2 Renovate FH OPTION 6	34,600	\$56.89	<b>\$1,968,552</b>
Central Office	20,700	\$957.09	<b>\$19,811,723</b>
Mass Timber Structure - OPTION A		ADD	<b>\$12,227,320</b>
Mass Timber Structure - OPTION B		ADD	<b>\$9,107,490</b>
Mass Timber Structure - OPTION C		ADD	<b>\$2,212,000</b>
HVAC ALTERNATE (ASHP) - Includes C2 Softball Field Credit		DEDUCT	<b>(\$16,058,560)</b>

NOTE: It is our opinion that any cost premiums associated with the radial footprint options (Branch, Bloom + Braid) are de minimis and are not a cost factor in determining the relative costs between options.

NOTE: Mass Timber Options need to be vetted with manufacturers + installers which will require more design information; Pricing above needs verification



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**MAIN CONSTRUCTION COST SUMMARY**

	Start Date	Gross Floor Area	\$/sf	Estimated Construction Cost
<b>OPTION A.1 - Base Repair/Code Update</b>				
CODE UPGRADES TO EXISTING SCHOOL		352,000	\$400.00	\$140,800,000
REMOVE HAZARDOUS MATERIALS <sup>1</sup>				\$2,100,000
TRANSITE PIPE REMOVAL				\$1,000,000
SITWORK - Allowance (code upgrades only)				\$7,000,000
SITWORK - Premium Contaminated Soils				NIC
SUB-TOTAL	Jun-27	352,000	\$428.69	\$150,900,000
ESCALATION TO MID-POINT	8.40%			\$12,675,600
DESIGN AND PRICING CONTINGENCY	15.0%			\$24,536,340
SUB-TOTAL		352,000	\$534.41	\$188,111,940
GENERAL CONDITIONS	36	MTHS	\$350,000	\$12,600,000
GENERAL REQUIREMENTS	4.00%			\$7,524,478
PHASING	3.00%			\$5,643,358
BONDS	0.75%			\$1,410,840
INSURANCES	2.00%			\$3,762,239
PERMIT				Excl
SUB-TOTAL				\$219,052,855
CM FEE	3.0%			\$6,571,586
GMP CONTINGENCY	2.5%			\$4,702,799
MODULAR CLASSROOMS				Excluded
<b>TOTAL OF ALL CONSTRUCTION</b>		352,000	\$654.34	<b>\$230,327,240</b>

<sup>1</sup> Costs from CDW report



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**MAIN CONSTRUCTION COST SUMMARY**

	Start Date	Gross Floor Area	\$/sf	Estimated Construction Cost
<b>OPTION B.1 - Add/Reno Quad</b>				
NEW ADDITION + RENOVATE EXISTING SCHOOL		440,816	\$622.59	\$274,448,126
DEMOLITION		234,150	\$12.00	\$2,809,800
REMOVE HAZARDOUS MATERIALS <sup>1</sup>				\$2,100,000
TRANSITE PIPE REMOVAL				\$1,000,000
SITEWORK -Allowance				\$32,850,758
SITEWORK - Premium Contaminated Soils				\$1,000,000
SUB-TOTAL	Jun-27	440,816	\$712.79	\$314,208,684
ESCALATION TO MID-POINT	12.90%			\$40,532,920
DESIGN AND PRICING CONTINGENCY	15.0%			\$53,211,241
SUB-TOTAL		440,816	\$925.45	\$407,952,845
GENERAL CONDITIONS	72	MTHS	\$350,000	\$25,200,000
GENERAL REQUIREMENTS	4.00%			\$16,318,114
PHASING	2.00%			\$8,159,057
BONDS	0.75%			\$3,059,646
INSURANCES	2.00%			\$8,159,057
PERMIT				Excl
SUB-TOTAL				\$468,848,719
CM FEE	3.0%			\$14,065,462
GMP CONTINGENCY	2.5%			\$10,198,821
MODULAR CLASSROOMS				Excluded
<b>TOTAL OF ALL CONSTRUCTION</b>		440,816	\$1,118.64	<b>\$493,113,002</b>

<sup>1</sup> Costs from CDW report



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	Start Date	Gross Floor Area	\$/sf	Estimated Construction Cost
<b>OPTION B.4 - Add/Reno Figure Eight</b>				
NEW ADDITION + RENOVATE EXISTING SCHOOL		440,816	\$613.91	\$270,622,200
DEMOLITION		179,740	\$12.00	\$2,156,880
REMOVE HAZARDOUS MATERIALS <sup>1</sup>				\$2,100,000
TRANSITE PIPE REMOVAL				\$1,000,000
SITEWORK - Allowance				\$31,642,436
SITEWORK - Premium Contaminated Soils				\$1,000,000
SUB-TOTAL	Jun-27	440,816	\$699.89	\$308,521,516
ESCALATION TO MID-POINT	13.40%			\$41,341,883
DESIGN AND PRICING CONTINGENCY	15.0%			\$52,479,510
SUB-TOTAL		440,816	\$912.72	\$402,342,909
GENERAL CONDITIONS	76	MTHS	\$350,000	\$26,600,000
GENERAL REQUIREMENTS	4.00%			\$16,093,716
PHASING	3.00%			\$12,070,287
BONDS	0.75%			\$3,017,572
INSURANCES	2.00%			\$8,046,858
PERMIT				Excl
SUB-TOTAL				\$468,171,342
CM FEE	3.0%			\$14,045,140
GMP CONTINGENCY	2.5%			\$10,058,573
MODULAR CLASSROOMS				NR
<b>TOTAL OF ALL CONSTRUCTION</b>		440,816	\$1,116.74	<b>\$492,275,055</b>

<sup>1</sup> Costs from CDW report



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**MAIN CONSTRUCTION COST SUMMARY**

	Start Date	Gross Floor Area	\$/sf	Estimated Construction Cost
<b>OPTION C1d - New Construction Branch</b>				
NEW CONSTRUCTION		440,816	\$626.26	\$276,065,091
DEMOLITION		320,720	\$10.00	\$3,207,200
REMOVE HAZARDOUS MATERIALS <sup>1</sup>				\$2,100,000
TRANSITE PIPE REMOVAL				\$1,000,000
SITEWORK -Allowance				\$35,966,651
SITEWORK - Premium Contaminated Soils				\$1,000,000
SUB-TOTAL	Jun-27	440,816	\$724.43	\$319,338,942
ESCALATION TO MID-POINT	10.20%			\$32,572,572
DESIGN AND PRICING CONTINGENCY	15.0%			\$52,786,727
SUB-TOTAL		440,816	\$918.07	\$404,698,241
GENERAL CONDITIONS	52	MTHS	\$350,000	\$18,200,000
GENERAL REQUIREMENTS	4.00%			\$16,187,930
PHASING				NR
BONDS	0.75%			\$3,035,237
INSURANCES	2.00%			\$8,093,965
PERMIT				Excl
SUB-TOTAL				\$450,215,373
CM FEE	3.0%			\$13,506,461
GMP CONTINGENCY	2.5%			\$10,117,456
<b>TOTAL OF ALL CONSTRUCTION</b>		440,816	\$1,074.91	<b>\$473,839,290</b>

<sup>1</sup> Costs from CDW report



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**MAIN CONSTRUCTION COST SUMMARY**

	Start Date	Gross Floor Area	\$/sf	Estimated Construction Cost
<b>OPTION C2b - New Construction Braid</b>				
NEW CONSTRUCTION		440,816	\$615.65	\$271,388,482
DEMOLITION		320,720	\$10.00	\$3,207,200
REMOVE HAZARDOUS MATERIALS <sup>1</sup>				\$2,100,000
TRANSITE PIPE REMOVAL				\$1,000,000
SITEWORK -Allowance				\$36,671,757
SITEWORK - Premium Contaminated Soils				\$1,000,000
SUB-TOTAL	Jun-27	440,816	\$715.42	\$315,367,439
ESCALATION TO MID-POINT	10.20%			\$32,167,479
DESIGN AND PRICING CONTINGENCY	15.0%			\$52,130,238
SUB-TOTAL		440,816	\$906.65	\$399,665,156
GENERAL CONDITIONS	52	MTHS	\$350,000	\$18,200,000
GENERAL REQUIREMENTS	4.00%			\$15,986,606
PHASING				NR
BONDS	0.75%			\$2,997,489
INSURANCES	2.00%			\$7,993,303
PERMIT				Excl
SUB-TOTAL				\$444,842,554
CM FEE	3.0%			\$13,345,277
GMP CONTINGENCY	2.5%			\$9,991,629
<b>TOTAL OF ALL CONSTRUCTION</b>		440,816	\$1,062.07	<b>\$468,179,460</b>

<sup>1</sup> Costs from CDW report





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**MAIN CONSTRUCTION COST SUMMARY**

	Start Date	Gross Floor Area	\$/sf	Estimated Construction Cost
<b>OPTION C5b - New Construction Bloom</b>				
NEW CONSTRUCTION		440,816	\$625.42	\$275,694,472
DEMOLITION		320,720	\$10.00	\$3,207,200
REMOVE HAZARDOUS MATERIALS <sup>1</sup>				\$2,100,000
TRANSITE PIPE REMOVAL				\$1,000,000
SITEWORK -Allowance				\$37,210,509
SITEWORK - Premium Contaminated Soils				\$1,000,000
SUB-TOTAL	Jun-27	440,816	\$726.41	\$320,212,181
ESCALATION TO MID-POINT	10.20%			\$32,661,642
DESIGN AND PRICING CONTINGENCY	15.0%			\$52,931,073
SUB-TOTAL		440,816	\$920.58	\$405,804,896
GENERAL CONDITIONS	52	MTHS	\$360,000	\$18,720,000
GENERAL REQUIREMENTS	4.00%			\$16,232,196
PHASING				NR
BONDS	0.75%			\$3,043,537
INSURANCES	2.00%			\$8,116,098
PERMIT				Excl
SUB-TOTAL				\$451,916,727
CM FEE	3.0%			\$13,557,502
GMP CONTINGENCY	2.5%			\$10,145,122
<b>TOTAL OF ALL CONSTRUCTION</b>		440,816	\$1,078.95	<b>\$475,619,351</b>

<sup>1</sup> Costs from CDW report



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**MAIN CONSTRUCTION COST SUMMARY**

	Start Date	Gross Floor Area	\$/sf	Estimated Construction Cost
<b>OPTION D.2 - New Construction Phased in Place</b>				
NEW CONSTRUCTION		440,816	\$618.64	\$272,705,679
DEMOLITION		320,720	\$10.00	\$3,207,200
REMOVE HAZARDOUS MATERIALS <sup>1</sup>				\$2,100,000
TRANSITE PIPE REMOVAL				\$1,000,000
SITEWORK -Allowance				\$33,799,050
SITEWORK - Premium Contaminated Soils				\$1,000,000
SUB-TOTAL	Jun-27	440,816	\$711.89	\$313,811,929
ESCALATION TO MID-POINT	13.90%			\$43,619,858
DESIGN AND PRICING CONTINGENCY	15.0%			\$53,614,768
SUB-TOTAL		440,816	\$932.47	\$411,046,555
GENERAL CONDITIONS	78	MTHS	\$360,000	\$28,080,000
GENERAL REQUIREMENTS	4.00%			\$16,441,862
PHASING	3.00%			\$12,331,397
BONDS	0.75%			\$3,082,849
INSURANCES	2.00%			\$8,220,931
PERMIT				Excl
SUB-TOTAL				\$479,203,594
CM FEE	3.0%			\$14,376,108
GMP CONTINGENCY	2.5%			\$10,276,164
<b>TOTAL OF ALL CONSTRUCTION</b>		440,816	\$1,143.01	<b>\$503,855,866</b>



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MAIN CONSTRUCTION COST SUMMARY

	Start Date	Gross Floor Area	\$/sf	Estimated Construction Cost
<b>F.1 NEW FIELD HOUSE OPTION 1</b>				
NEW CONSTRUCTION		36,000	\$455.68	\$16,404,658
PREMIUM FOR GEOTHERMAL				\$1,950,000
PREMIUM FOR PV				\$1,296,000
DEMOLITION		34,000	\$10.00	\$340,000
SITEWORK - Separate Utilities				\$250,000
<hr/>				
SUB-TOTAL	Jun-28	36,000	\$562.24	\$20,240,658
ESCALATION TO MID-POINT	11.40%			\$2,307,435
DESIGN AND PRICING CONTINGENCY	15.0%			\$3,382,214
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SUB-TOTAL		36,000	\$720.29	\$25,930,307
GENERAL CONDITIONS	6.00%			\$1,555,818
GENERAL REQUIREMENTS	4.00%			\$1,037,212
BONDS	0.75%			\$194,477
INSURANCES	2.00%			\$518,606
PERMIT				Excl
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SUB-TOTAL				\$29,236,420
CM FEE	3.0%			\$877,093
GMP CONTINGENCY	2.5%			\$648,258
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TOTAL OF ALL CONSTRUCTION		36,000	\$854.49	<b>\$30,761,771</b>



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MAIN CONSTRUCTION COST SUMMARY

	Start Date	Gross Floor Area	\$/sf	Estimated Construction Cost
<b>F.2 NEW FIELD HOUSE OPTION 2</b>				
NEW CONSTRUCTION		72,000	\$420.75	\$30,294,335
PREMIUM FOR GEOTHERMAL				\$3,900,000
PREMIUM FOR PV				\$2,592,000
DEMOLITION		34,000	\$10.00	\$340,000
SITEWORK - Separate Utilities				\$250,000
<hr/>				
SUB-TOTAL	Jun-28	72,000	\$519.12	\$37,376,335
ESCALATION TO MID-POINT	11.40%			\$4,260,902
DESIGN AND PRICING CONTINGENCY	15.0%			\$6,245,586
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SUB-TOTAL		72,000	\$665.04	\$47,882,823
GENERAL CONDITIONS	6.00%			\$2,872,969
GENERAL REQUIREMENTS	4.00%			\$1,915,313
BONDS	0.75%			\$359,121
INSURANCES	2.00%			\$957,656
PERMIT				Excl
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SUB-TOTAL				\$53,987,882
CM FEE	3.0%			\$1,619,636
GMP CONTINGENCY	2.5%			\$1,197,071
<hr/>				
TOTAL OF ALL CONSTRUCTION		72,000	\$788.95	<b>\$56,804,589</b>



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MAIN CONSTRUCTION COST SUMMARY

	Start Date	Gross Floor Area	\$/sf	Estimated Construction Cost
<b>G.1 ADD/RENO FIELD HOUSE OPTION 3</b>				
RENOVATION/ADDITION		48,000	\$365.27	\$17,532,798
PREMIUM FOR GEOTHERMAL				\$2,600,000
PREMIUM FOR PV				\$1,728,000
DEMOLITION				NR
SITEWORK - Separate Utilities				\$250,000
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SUB-TOTAL	Jun-28	48,000	\$460.64	\$22,110,798
ESCALATION TO MID-POINT	11.40%			\$2,520,631
DESIGN AND PRICING CONTINGENCY	15.0%			\$3,694,714
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SUB-TOTAL		48,000	\$590.13	\$28,326,143
GENERAL CONDITIONS	6.00%			\$1,699,569
GENERAL REQUIREMENTS	4.00%			\$1,133,046
BONDS	0.75%			\$212,446
INSURANCES	2.00%			\$566,523
PERMIT				Excl
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SUB-TOTAL				\$31,937,727
CM FEE	3.0%			\$958,132
GMP CONTINGENCY	2.5%			\$708,154
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TOTAL OF ALL CONSTRUCTION		48,000	\$700.08	<b>\$33,604,013</b>



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MAIN CONSTRUCTION COST SUMMARY

	Start Date	Gross Floor Area	\$/sf	Estimated Construction Cost
<b>F.3 NEW FIELD HOUSE OPTION 4</b>				
NEW CONSTRUCTION		60,000	\$432.92	\$25,975,283
PREMIUM FOR GEOTHERMAL				\$3,250,000
PREMIUM FOR PV				\$2,160,000
DEMOLITION		34,000	\$10.00	\$340,000
SITEWORK - Separate Utilities				\$250,000
SUB-TOTAL	Jun-28	60,000	\$532.92	\$31,975,283
ESCALATION TO MID-POINT	11.40%			\$3,645,182
DESIGN AND PRICING CONTINGENCY	15.0%			\$5,343,070
SUB-TOTAL		60,000	\$682.73	\$40,963,535
GENERAL CONDITIONS	6.00%			\$2,457,812
GENERAL REQUIREMENTS	4.00%			\$1,638,541
BONDS	0.75%			\$307,227
INSURANCES	2.00%			\$819,271
PERMIT				Excl
SUB-TOTAL				\$46,186,386
CM FEE	3.0%			\$1,385,592
GMP CONTINGENCY	2.5%			\$1,024,088
TOTAL OF ALL CONSTRUCTION		60,000	\$809.93	<b>\$48,596,066</b>



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MAIN CONSTRUCTION COST SUMMARY

	Start Date	Gross Floor Area	\$/sf	Estimated Construction Cost
<b>G.0 RENO FIELD HOUSE OPTION 5</b>				
RENOVATION		34,000	\$326.65	\$11,106,019
PREMIUM FOR GEOTHERMAL				\$1,841,667
PREMIUM FOR PV				\$1,224,000
DEMOLITION				NR
SITWORK - Separate Utilities				\$250,000
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SUB-TOTAL	Jun-28	34,000	\$424.17	\$14,421,686
ESCALATION TO MID-POINT	11.40%			\$1,644,072
DESIGN AND PRICING CONTINGENCY	15.0%			\$2,409,864
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SUB-TOTAL		34,000	\$543.40	\$18,475,622
GENERAL CONDITIONS	6.00%			\$1,108,537
GENERAL REQUIREMENTS	4.00%			\$739,025
BONDS	0.75%			\$138,567
INSURANCES	2.00%			\$369,512
PERMIT				Excl
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SUB-TOTAL				\$20,831,263
CM FEE	3.0%			\$624,938
GMP CONTINGENCY	2.5%			\$461,891
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<b>TOTAL OF ALL CONSTRUCTION</b>		34,000	\$644.65	<b>\$21,918,092</b>



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	Start Date	Gross Floor Area	\$/sf	Estimated Construction Cost
<b>G.2 RENO FIELD HOUSE OPTION 6</b>				
RENOVATION		34,600	\$35.99	\$1,245,270
PREMIUM FOR GEOTHERMAL				NR
PREMIUM FOR PV				NR
DEMOLITION				NR
SITework - Separate Utilities				\$50,000
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SUB-TOTAL	Jun-28	34,600	\$37.44	\$1,295,270
ESCALATION TO MID-POINT	11.40%			\$147,661
DESIGN AND PRICING CONTINGENCY	15.0%			\$216,440
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SUB-TOTAL		34,600	\$47.96	\$1,659,371
GENERAL CONDITIONS	6.00%			\$99,562
GENERAL REQUIREMENTS	4.00%			\$66,375
BONDS	0.75%			\$12,445
INSURANCES	2.00%			\$33,187
PERMIT				Excl
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SUB-TOTAL				\$1,870,940
CM FEE	3.0%			\$56,128
GMP CONTINGENCY	2.5%			\$41,484
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<b>TOTAL OF ALL CONSTRUCTION</b>		34,600	\$56.89	<b>\$1,968,552</b>





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MAIN CONSTRUCTION COST SUMMARY

	Start Date	Gross Floor Area	\$/sf	Estimated Construction Cost
<b>H.1 NEW POOL</b>				
NEW POOL BUILDING		16,400	\$650.00	\$10,660,000
PREMIUM FOR GEOTHERMAL				\$2,625,000
PREMIUM FOR PV				\$354,240
DEMOLITION				NR
SITEWORK - Separate Utilities				\$250,000
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SUB-TOTAL	Jun-28	16,400	\$846.90	\$13,889,240
ESCALATION TO MID-POINT	11.40%			\$1,583,373
DESIGN AND PRICING CONTINGENCY	15.0%			\$2,320,892
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SUB-TOTAL		16,400	\$1,084.97	\$17,793,505
GENERAL CONDITIONS	6.00%			\$1,067,610
GENERAL REQUIREMENTS	4.00%			\$711,740
PHASING	2.00%			\$355,870
BONDS	0.75%			\$133,451
INSURANCES	2.00%			\$355,870
PERMIT				Excl
<hr/>				
SUB-TOTAL				\$20,418,046
CM FEE	3.0%			\$612,541
GMP CONTINGENCY	2.5%			\$444,838
<hr/>				
<b>TOTAL OF ALL CONSTRUCTION</b>		16,400	\$1,309.48	<b>\$21,475,425</b>



**Lexington High School**  
Town of Lexington, MA

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**PSR Options Cost Estimate**

**MAIN CONSTRUCTION COST SUMMARY**

	<b>Start Date</b>	<b>Gross Floor Area</b>	<b>\$/sf</b>	<b>Estimated Construction Cost</b>
<b>CENTRAL OFFICE</b>				
NEW CONSTRUCTION		20,700	\$500.00	\$10,350,000
PREMIUM FOR GEOTHERMAL				\$750,000
PREMIUM FOR PV				\$432,000
SITEWORK -Allowance for 100 car spots				\$1,000,000
<hr/>				
SUB-TOTAL	Jun-26	20,700	\$605.41	\$12,532,000
ESCALATION TO MID-POINT	13.90%			\$1,741,948
DESIGN AND PRICING CONTINGENCY	15.0%			\$2,141,092
<hr/>				
SUB-TOTAL		20,700	\$793.00	\$16,415,040
GENERAL CONDITIONS	6.00%			\$984,902
GENERAL REQUIREMENTS	4.00%			\$656,602
PHASING	2.00%			\$328,301
BONDS	0.75%			\$123,113
INSURANCES	2.00%			\$328,301
PERMIT				Excl
<hr/>				
SUB-TOTAL				\$18,836,259
CM FEE	3.0%			\$565,088
GMP CONTINGENCY	2.5%			\$410,376
<hr/>				
<b>TOTAL OF ALL CONSTRUCTION</b>		20,700	\$957.09	<b>\$19,811,723</b>



Lexington High School  
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PSR Options Cost Estimate

GFA 440,816

## CONSTRUCTION COST SUMMARY

BUILDING SYSTEM		SUB-TOTAL	TOTAL	\$/SF	%
<b>BUILDING SUMMARY - OPTION B.1</b>					
<b>A10</b>	<b>FOUNDATIONS</b>				
A1010	Standard Foundations	\$5,019,491			
A1020	Special Foundations	\$6,040,405			
A1030	Lowest Floor Construction	\$5,305,026	<b>\$16,364,922</b>	\$37.12	6.0%
<b>A20</b>	<b>BASEMENT CONSTRUCTION</b>				
A2010	Basement Excavation	\$0			
A2020	Basement Walls	\$0	<b>\$0</b>	\$0.00	0.0%
<b>B10</b>	<b>SUPERSTRUCTURE</b>				
B1010	Upper Floor Construction	\$13,081,193			
B1020	Roof Construction	\$9,333,996	<b>\$22,415,189</b>	\$50.85	8.2%
<b>B20</b>	<b>EXTERIOR CLOSURE</b>				
B2010	Exterior Walls	\$20,350,566			
B2020	Windows	\$9,009,917			
B2030	Exterior Doors	\$440,816	<b>\$29,801,299</b>	\$67.60	10.9%
<b>B30</b>	<b>ROOFING</b>				
B3010	Roof Coverings	\$9,179,923			
B3020	Roof Openings	\$54,000	<b>\$9,233,923</b>	\$20.95	3.4%
<b>C10</b>	<b>INTERIOR CONSTRUCTION</b>				
C1010	Partitions	\$19,786,516			
C1020	Interior Doors	\$5,399,528			
C1030	Specialties/Millwork	\$6,680,093	<b>\$31,866,137</b>	\$72.29	11.6%
<b>C20</b>	<b>STAIRCASES</b>				
C2010	Stair Construction	\$1,162,250			
C2020	Stair Finishes	\$340,000	<b>\$1,502,250</b>	\$3.41	0.5%
<b>C30</b>	<b>INTERIOR FINISHES</b>				
C3010	Wall Finishes	\$7,493,872			
C3020	Floor Finishes	\$7,045,090			
C3030	Ceiling Finishes	\$6,612,240	<b>\$21,151,202</b>	\$47.98	7.7%
<b>D10</b>	<b>CONVEYING SYSTEMS</b>				
D1010	Elevator	\$1,207,200	<b>\$1,207,200</b>	\$2.74	0.4%



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## CONSTRUCTION COST SUMMARY

BUILDING SYSTEM	SUB-TOTAL	TOTAL	\$/SF	%
<b>BUILDING SUMMARY - OPTION B.1</b>				
<b>D20 PLUMBING</b>				
D20 Plumbing	\$13,342,848	<b>\$13,342,848</b>	\$30.27	4.9%
<b>D30 HVAC</b>				
D30 HVAC	\$62,423,440	<b>\$62,423,440</b>	\$141.61	22.7%
<b>D40 FIRE PROTECTION</b>				
D40 Fire Protection	\$4,117,344	<b>\$4,117,344</b>	\$9.34	1.5%
<b>D50 ELECTRICAL</b>				
D5010 Complete System	\$48,579,300	<b>\$48,579,300</b>	\$110.20	17.7%
<b>E10 EQUIPMENT</b>				
E10 Equipment	\$5,111,385	<b>\$5,111,385</b>	\$11.60	1.9%
<b>E20 FURNISHINGS</b>				
E2010 Fixed Furnishings	\$5,704,012			
E2020 Movable Furnishings	NIC	<b>\$5,704,012</b>	\$12.94	2.1%
<b>F10 SPECIAL CONSTRUCTION</b>				
F10 Special Construction	\$150,000	<b>\$150,000</b>	\$0.34	0.1%
<b>F20 HAZMAT REMOVALS</b>				
F2010 Building Elements Demolition	\$1,477,675			
F2020 Hazardous Components Abatement	\$0	<b>\$1,477,675</b>	\$3.35	0.5%
<b>TOTAL DIRECT COST (Trade Costs)</b>		<b>\$274,448,126</b>	\$622.59	100.0%



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440,816

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**BUILDING BACKUP - OPTION B.1**

**GROSS FLOOR AREA CALCULATION**

Level 1	172,583
Level 2	61,437
Level 3	60,113
Level 4	60,113
Heavy Renovation	86,570

**TOTAL GROSS FLOOR AREA (GFA)**

**440,816 sf**

**A10 FOUNDATIONS**

**A1010 STANDARD FOUNDATIONS**

Strip Footings: 1 x 3

Formwork	6,388	sf	15.00	95,820
Re-bar	42,161	lbs.	2.50	105,403
Concrete material	373	cy	160.00	59,680
Placing concrete	373	cy	120.00	44,760

Perimeter foundation walls: 20" Thick x 3.5 ft H

Formwork	22,358	sf	21.00	469,518
Re-bar	55,895	lbs.	2.50	139,738
Concrete material	726	cy	160.00	116,160
Placing concrete	726	cy	120.00	87,120
Form shelf	3,194	lf	8.00	25,552

Spread Footings: 9 x 9 x 2 (Three Story)

Formwork	20,232	sf	18.00	364,176
Re-bar	136,566	lbs.	2.50	341,415
Concrete material	1,770	cy	160.00	283,200
Placing concrete	1,770	cy	120.00	212,400
Set anchor bolts grout plates	281	ea	250.00	70,250

Spread Footings: 10 x 10 x 2 (Four Story)

Formwork	12,000	sf	18.00	216,000
Re-bar	90,000	lbs.	2.50	225,000
Concrete material	1,167	cy	160.00	186,720
Placing concrete	1,167	cy	120.00	140,040
Set anchor bolts grout plates	150	ea	250.00	37,500

Piers

Formwork	431	ea		
Formwork	5,172	sf	24.00	124,128
Re-bar	58,185	lbs	2.50	145,463
Concrete material	201	cy	160.00	32,160
Placing concrete	201	cy	160.00	32,160
Housekeeping pads	1	ls	30,000.00	30,000

070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Dampproofing @ foundation wall	12,776	sf	4.00	51,104
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072100 THERMAL INSULATION

Rigid insulation to face of foundation wall; 4" R-20	12,776	sf	5.00	63,880
Brick Shelf 4" insulation	3,194	lf	20.00	63,880

312000 EARTHWORK

Strip footings

Excavation	3,549	cy	14.00	49,686
Reuse excess material on site	1,099	cy	15.00	16,485
Backfill with select fill	2,450	cy	25.00	61,250

Spread footings

Excavation	8,237	cy	14.00	115,318
Reuse excess material on site	3,138	cy	15.00	47,070
Backfill with select fill	5,099	cy	25.00	127,475

Miscellaneous



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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>BUILDING BACKUP - OPTION B.1</b>							
	Foundation drain	3,194	lf	30.00	95,820		
	New brick ledge tied to existing foundation wall	1,387	lf	200.00	277,400		
	Excavation + backfill to expose existing foundations	822	cy	80.00	65,760		
	New foundations in existing building for bracing etc.	1	ls	150,000.00	150,000		
	Temporary dewatering for foundation work	1	ls	250,000.00	250,000		
	SUBTOTAL					5,019,491	
<b>A1020 SPECIAL FOUNDATIONS</b>							
	Rigid inclusions	172,583	sf	35.00	6,040,405		
	SUBTOTAL					6,040,405	
<b>A1030 LOWEST FLOOR CONSTRUCTION</b>							
033000	CONCRETE						
	Vapor barrier, 15mils	172,583	sf	1.25	215,729		
	Slab on grade	172,583	sf				
	WWF reinforcement	198,470	sf	1.85	367,170		
	Concrete - 5" thick	2,752	cy	170.00	467,840		
	Placing concrete	2,752	cy	65.00	178,880		
	Finishing and curing concrete	172,583	sf	3.00	517,749		
	Control joints - saw cut	172,583	sf	0.10	17,258		
	Miscellaneous						
	Patch existing floors	48,870	sf	5.00	244,350		
	Equipment pads	1	ls	30,000.00	30,000		
	Loading dock	1	ls	50,000.00	50,000		
	Elevator pits	3	ea	40,000.00	120,000		
	Radon system				Excluded; NR		
072100	THERMAL INSULATION						
	Perimeter insulation, 4" thick R-20 - 6ft at perimeter	19,164	sf	5.00	95,820		
	Under slab insulation, 2" thick under slab	153,419	sf	3.00	460,257		
312000	EARTHWORK						
	Gravel base, 12"	6,392	cy	45.00	287,640		
	Structural fill	28,400	cy	55.00	1,562,000		
	Allowance for underslab drainage	172,583	sf	2.00	345,166		
	Compact existing sub-grade	172,583	sf	0.50	86,292		
	Underslab E&B for plumbing	172,583	sf	1.50	258,875		
	SUBTOTAL					5,305,026	
<b>TOTAL - FOUNDATIONS</b>							<b>\$16,364,922</b>

**A20 BASEMENT CONSTRUCTION**

**A2010 BASEMENT EXCAVATION**

No Work in this section  
SUBTOTAL

-

**A2020 BASEMENT WALLS**

No Work in this section  
SUBTOTAL

-

**TOTAL - BASEMENT CONSTRUCTION**

**B10 SUPERSTRUCTURE**

**B1010 FLOOR CONSTRUCTION**

11.6 lbs/sf  
2,564 tns including canopies + roof screens  
\$6,680 \$/Ton

033000 CONCRETE

WWF reinforcement	208,912	sf	1.85	386,487
Concrete Fill to metal deck; lightweight, total thickness 6 1/4"	3,674	cy	190.00	698,060
Place and finish concrete	181,663	sf	3.00	544,989
Rebar to decks	54,499	lbs	2.00	108,998

051200 STRUCTURAL STEEL FRAMING



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**BUILDING BACKUP - OPTION B.1**

Structural steel framing; Complete; 15 lbs per SF	1,362	tns	5,000.00	6,810,000		
New bracing steel at existing; 1 PSF	43	tns	8,000.00	344,000		
Steel premium for lateral system due to poor soils; 1 PSF	91	tns	5,000.00	455,000		
Moment connections	68	ea	750.00	51,000		
Shear studs	45,416	ea	3.50	158,956		
3" metal galvanized floor deck	181,663	sf	8.00	1,453,304		
Expansion joints	1	ls	100,000.00	100,000		
Seismic upgrades	86,570	sf	10.00	865,700		

078100 FIREPROOFING/FIRESTOPPING

Fire proofing to columns and beams; 2 hr	268,233	sf	3.00	804,699		
Intumescent paint @ architecturally exposed beams and columns - allow	1	ls	300,000.00	300,000		

SUBTOTAL

13,081,193

**B1020 ROOF CONSTRUCTION**

033000 CONCRETE

6" Normal weight concrete deck at low roof and at mechanical equipment pads	35,000	sf	9.00	315,000		
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051200 STRUCTURAL STEEL FRAMING

Structural steel framing; Complete; 13 lbs per SF	1,122	tns	5,000.00	5,610,000		
Structural steel framing; 2 lbs per SF premium at RTU's	35	tns	4,800.00	168,000		
Steel premium for lateral system due to poor soils; 1 PSF	86	tns	5,000.00	430,000		
Roof screens	80	tns	5,500.00	440,000		

Decking

1 1/2" galvanized metal deck, typical	172,583	sf	7.00	1,208,081		
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078100 FIREPROOFING/FIRESTOPPING

Fireproofing to columns, beams and deck; 1 hr - includes Intumescent	172,583	sf	5.00	862,915		
Intumescent paint @ architecturally exposed beams and columns - allow	1	ls	300,000.00	300,000		

SUBTOTAL

9,333,996

**TOTAL - SUPERSTRUCTURE**

**\$22,415,189**

**B20 EXTERIOR CLOSURE**

**B2010 EXTERIOR WALLS**

**Exterior Wall Area**

165,687 Total closure area  
104,735 sf total area solid

042000 MASONRY

Mockup	1	ls	100,000.00	100,000		
Brick veneer; 60% of Solid	43,311	sf	44.00	1,905,684		
Repoint existing brick	19,530	sf	45.00	878,850		
Granite veneer base; 2%	2,095	sf	120.00	251,400		
Precast trim allowance	1	ls	1,000,000.00	1,000,000		
4" CMU wall at auditorium	9,000	sf	30.00	270,000		
8" Mineral wool at exterior closure (2 layers 4")	104,735	sf	7.50	785,513		
Miscellaneous flashings and sealants	104,735	sf	1.50	157,103		
Staging to exterior wall	104,735	sf	4.00	418,940		

055000 MISC. METALS

Misc. metals at masonry including loose lintels (relieving angles included in steel tns)	43,311	sf	1.50	64,967		
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070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Air barrier	104,735	sf	10.00	1,047,350		
Miscellaneous sealants to closure	104,735	sf	1.00	104,735		

072100 THERMAL INSULATION

4" cellulose insulation in stud	104,735	sf	3.25	340,389		
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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>BUILDING BACKUP - OPTION B.1</b>							
	Insulation at glazed openings	13,807	lf	6.00	82,842		
076400	CLADDING						
	Composite metal panel, Alucobond or equal; 18%	18,852	sf	100.00	1,885,200		
	Terracotta; 20%	40,477	sf	160.00	6,476,320		
	12' high Acoustic Equipment Screen	16,000	sf	95.00	1,520,000		
	Canopies; soffit + framing	4,000	sf	100.00	400,000		
	EXPANSION JOINT COVERS						
	Thermal breaks	1	ls	50,000.00	50,000		
	Expansion joints	1	ls	100,000.00	100,000		
092900	GYPSUM BOARD ASSEMBLIES						
	Exterior wall;						
	6" Stud backup	104,735	sf	16.00	1,675,760		
	Gypsum Sheathing	104,735	sf	3.50	366,573		
	Drywall lining to interior face of stud backup	104,735	sf	4.00	418,940		
101400	SIGNAGE						
	Exterior signage - allowance	1	ls	50,000.00	50,000		
	SUBTOTAL					20,350,566	
<b>B2020</b>	<b>WINDOWS</b>						
	Exterior Wall Area	41,422	sf				
061000	ROUGH CARPENTRY						
	Wood blocking at openings	13,807	lf	10.00	138,070		
070001	WATERPROOFING, DAMPPROOFING AND CAULKING						
	Air barrier/flashing at windows	13,807	lf	10.00	138,070		
	Backer rod & double sealant	13,807	lf	11.00	151,877		
080001	METAL WINDOWS						
	Aluminum windows, triple glazed including interior and exterior trim per details	20,711	sf	175.00	3,624,425		
	Curtainwall, triple glazed including allowance for interior and exterior trim details	20,711	sf	225.00	4,659,975		
	Horizontal aluminum fin sunshades @ 40% of windows, custom color	1,700	lf	175.00	297,500		
089000	LOUVERS						
	Louvers					N/A	
	SUBTOTAL					9,009,917	
<b>B2030</b>	<b>EXTERIOR DOORS</b>						
	Allowance for exterior doors	440,816	gsf	1.00	440,816		
	SUBTOTAL					440,816	
<b>TOTAL - EXTERIOR CLOSURE</b>							<b>\$29,801,299</b>

**B30 ROOFING**

055000	MISCELLANEOUS METALS						
	Terrace top rail/ladders/stairs	1	ls	80,000.00	80,000		
061000	ROUGH CARPENTRY						
	Rough carpentry and blocking @ roof	224,978	sf	1.50	337,467		
070002	ROOFING AND FLASHING	224,978	total area				
	PVC roof membrane system, white or gray, 1/2" coverboard, 10" polyiso insulation, vapor barrier	224,978	sf	33.00	7,424,274		
	Canopy roofing	4,000	sf	28.00	112,000		
	Plaza deck pavers system at terrace	4,661	sf	70.00	326,270		
	Miscellaneous Roofing						
	Miscellaneous flashings/copings/walkway pads etc.	224,978	sf	4.00	899,912		





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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**BUILDING BACKUP - OPTION B.1**

SUBTOTAL 9,179,923

**B3020 ROOF OPENINGS**

086300 ROOF SKYLIGHTS  
Aluminum framed skylight (4loc) None Assumed  
Smoke vents; 7'x7' 3 ea 18,000.00 54,000  
SUBTOTAL 54,000

<b>TOTAL - ROOFING</b>	<b>\$9,233,923</b>
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**C10 INTERIOR CONSTRUCTION**

**C1010 PARTITIONS**

040001 MASONRY  
Allowance for masonry partitions 440,816 gsf 6.00 2,644,896  
061000 ROUGH CARPENTRY  
Backer panels in electrical closets 1 ls 10,000.00 10,000  
Wood blocking at interiors 440,816 gsf 0.50 220,408  
078400 FIREPROOFING/FIRESTOPPING  
Fire stopping including slab edges and core 440,816 gsf 1.00 440,816  
070001 WATERPROOFING, DAMPPROOFING AND CAULKING  
Miscellaneous sealants throughout building 440,816 gsf 1.25 551,020  
078150 EXPANSION JOINTS  
Allowance for expansion joint covers 1 ls 50,000.00 50,000  
081110 INTERIOR GLAZING  
Allowance for interior glazing 440,816 gsf 3.00 1,322,448  
092900 GYPSUM BOARD ASSEMBLIES  
Allowance for GWB partitions 440,816 gsf 33.00 14,546,928  
SUBTOTAL 19,786,516

**C1020 INTERIOR DOORS**

Doors, frames, hardware; complete 440,816 gsf 8.00 3,526,528  
Fire shutters 1 ls 150,000.00 150,000  
Security doors 16 loc 25,000.00 400,000  
Premium for electronic hardware; Hardwired 882 set 1,500.00 1,323,000  
SUBTOTAL 5,399,528

**C1030 SPECIALTIES / MILLWORK**

055000 MISCELLANEOUS METALS  
Miscellaneous metals throughout building 440,816 gsf 5.00 2,204,080  
061000 ROUGH CARPENTRY  
062000 INTERIOR ARCHITECTURAL WOODWORK  
Interior millwork package 440,816 gsf 3.00 1,322,448  
101100 VISUAL DISPLAY SURFACES  
Markerboard and tackboard package 440,816 gsf 2.00 881,632  
101400 SIGNAGE  
Room identification, directional & safety signage, building directory  
+ environmental graphics 440,816 gsf 2.00 881,632  
102800 TOILET ACCESSORIES  
Toilet accessories/compartments 440,816 gsf 1.00 440,816  
104400 FIRE PROTECTION SPECIALTIES



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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>BUILDING BACKUP - OPTION B.1</b>							
	Fire extinguisher cabinets	1	ls	65,852.71	65,853		
	AED cabinets	1	ls	2,000.00	2,000		
105000	LOCKERS						
	Student lockers	440,816	gsf	2.00	881,632		
	SUBTOTAL					6,680,093	

**TOTAL - INTERIOR CONSTRUCTION**

**\$31,866,137**

**C20 STAIRCASES**

**C2010 STAIR CONSTRUCTION**

033000	CONCRETE						
	Concrete to stairs	17	flt	5,000.00	85,000		
055000	MISCELLANEOUS METALS						
	Egress stairs w/ stainless steel rails and handrails	14	flt	50,000.00	700,000		
	Projection room stair, 4' wide	1	flt	40,000.00	40,000		
	<u>Learning stair</u>						
	Stainless steel guardrail	65	lf	425.00	27,625		
	Stainless steel handrail	55	lf	175.00	9,625		
	Adjacent stairs; 5'-3" wide	2	flt	75,000.00	150,000		
	Learning stair framing						
	Framing at learning stair - premium	1	ls	150,000.00	150,000		
	SUBTOTAL					1,162,250	

**C2020 STAIR FINISHES**

090005	RESILIENT FLOORS						
	Stair finishes	17	flts	20,000.00	340,000		
	SUBTOTAL					340,000	

**TOTAL - STAIRCASES**

**\$1,502,250**

**C30 INTERIOR FINISHES**

**C3010 WALL FINISHES**

	Wall finishes complete package	440,816	gsf	17.00	7,493,872		
	SUBTOTAL					7,493,872	

**C3020 FLOOR FINISHES**

	Floor finishes complete package	440,816	gsf	15.00	6,612,240		
	Floor prep at existing	86,570	sf	5.00	432,850		
	SUBTOTAL					7,045,090	

**C3030 CEILING FINISHES**

	Ceiling finishes complete package	440,816	gsf	15.00	6,612,240		
	SUBTOTAL					6,612,240	

**TOTAL - INTERIOR FINISHES**

**\$21,151,202**

**D10 CONVEYING SYSTEMS**

**D1010 ELEVATOR**

055000	MISCELLANEOUS METALS						
	Pit ladder and miscellaneous metals	3	ea	900.00	2,700		
	Sill angles	3	ls	1,500.00	4,500		
142100	ELEVATOR						
	Electric traction elevator, 4 stop, 5,000lbs	3	ea	400,000.00	1,200,000		
	SUBTOTAL					1,207,200	

**TOTAL - CONVEYING SYSTEMS**

**\$1,207,200**



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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**BUILDING BACKUP - OPTION B.1**

**D20 PLUMBING**

**D20 PLUMBING, GENERALLY**

Air source heat pump water heater (2) 500MBH	1	ls	1,000,000.00	1,000,000	
Plumbing package complete	440,816	gsf	28.00	12,342,848	
SUBTOTAL					13,342,848

**TOTAL - PLUMBING**

**\$13,342,848**

**D30 HVAC**

**D30 HVAC, GENERALLY**

Geothermal Wells 800' well	350	wells	65,000.00	22,750,000	
HVAC System; Water Source Heat Pump	440,816	gsf	90.00	39,673,440	
SUBTOTAL					62,423,440

**TOTAL - HVAC**

**\$62,423,440**

**D40 FIRE PROTECTION**

**D40 FIRE PROTECTION, GENERALLY**

Fire Equipment

Fire pump with controller 750GPM, incl Jockey pump with controller	1	ea	150,000.00	150,000	
Sprinkler system; complete	440,816	gsf	9.00	3,967,344	
SUBTOTAL					4,117,344

**TOTAL - FIRE PROTECTION**

**\$4,117,344**

**D50 ELECTRICAL**

**D5010 ELECTRICAL SYSTEMS**

**Gear & Distribution**

Normal power distribution system					
4000A 277/480V main switchboard	2	ea	185,000.00	370,000	
Panelboards/feeders	440,816	gsf	8.00	3,526,528	
<u>Emergency power</u>					
Emergency Generator; 1250 kW Diesel	1	ls	812,500.00	812,500	
Emergency power feeders	440,816	gsf	3.00	1,322,448	
<u>Photovoltaic - 3500 kW</u>					
PV system equipment; roof top	120,633	sf	36.00	4,342,788	
PV system equipment; canopy	93,060	sf	60.00	5,583,600	
Battery Storage	1	ls	2,500,000	2,500,000	
Transparent + opaque vertical cladding BIPV	4,918	sf	200.00	983,600	
<u>Equipment Wiring</u>					
Feeders + Electrical to equipment	440,816	gsf	10.00	4,408,160	
SUBTOTAL					23,849,624

**D5020 LIGHTING & POWER**

Lighting, Controls + Power	440,816	gsf	18.00	7,934,688	
SUBTOTAL					7,934,688

**D5030 COMMUNICATION & SECURITY SYSTEMS**

Telecommunications/PA + Clock	440,816	gsf	4.00	1,763,264	
<u>Performance lighting</u>					
Theater AV	1	ls	200,000.00	200,000	
Stage lighting fixture package	1	ls	250,000.00	250,000	
Audio Visual Systems	440,816	gsf	9.50	4,187,752	
Classroom speech + AV	225	rms	5,000.00	1,125,000	
<u>Specialty Communications Systems</u>					
BDA system, antenna and annunciator	440,816	sf	0.65	286,530	
Cell repeater/Distributed antenna system, not specified	440,816	sf	1.00	440,816	
Emergency 2 way communication system at elevator lobbies +stairs	1	ls	100,000.00	100,000	



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**BUILDING BACKUP - OPTION B.1**

<u>Fire Alarm</u>	440,816	gsf	4.00	1,763,264		
<u>Security System</u>	440,816	gsf	10.00	4,408,160		
SUBTOTAL						14,524,786

**D5040 OTHER ELECTRICAL SYSTEMS**

<u>Common Work Results for Electrical</u>						
Lightning prevention	440,816	gsf	0.30	132,245		
Grounding	440,816	gsf	0.40	176,326		
Misc. demolition work	440,816	gsf	0.25	110,204		
Temp power and lights	440,816	gsf	1.20	528,979		
Seismic restraints/Coordination/misc.	440,816	gsf	3.00	1,322,448		
SUBTOTAL						2,270,202

<b>TOTAL - ELECTRICAL</b>	<b>\$48,579,300</b>					
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**E10 EQUIPMENT**

**E10 EQUIPMENT, GENERALLY**

112000	LOADING DOCK EQUIPMENT					
	Loading dock leveler(2), truck restraints (2) and bumpers	1	ls	50,000.00	50,000	
110620	THEATRICAL EQUIPMENT					
	Stage lighting and fixtures - equipment only	1	ls	358,000.00	358,000	
	Stage rigging, installed	1	ls	275,000.00	275,000	
	Stage curtains, installed	1	ls	88,385.00	88,385	
	Forestage Platforms, installed	1	ls	100,000.00	100,000	
	Orchestra Enclosure, installed	1	ls	175,000.00	175,000	
	Orchestra Pit Lift	1	ls	150,000.00	150,000	
	Auditorium AV Equipment				See Electrical	
113100	APPLIANCES					
	Residential appliances - allowance	1	ls	60,000.00	60,000	
114000	FOOD SERVICE EQUIPMENT					
	Kitchen equipment	1	ls	2,500,000.00	2,500,000	
115300	EDUCATIONAL EQUIPMENT					
	Science equipment;	1	ls	400,000.00	400,000	
	Kiln	1	ea	5,000.00	5,000	
	Allowance for miscellaneous equipment	1	ls	50,000	50,000	
116600	GYM EQUIPMENT					
	Gym Equipment	1	ls	500,000.00	500,000	
126000	SEATING					
	Auditorium seating	1,000	seat	400.00	400,000	
	SUBTOTAL					5,111,385

<b>TOTAL - EQUIPMENT</b>	<b>\$5,111,385</b>					
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**E20 FURNISHINGS**

**E2010 FIXED FURNISHINGS**

122100	WINDOW TREATMENT					
	Window shades at exterior glazing including blackout shades at art & science classrooms - allowance	41,422	sf	10.00	414,220	
123553	CASEWORK					
	Casework package	440,816	gsf	12.00	5,289,792	
	SUBTOTAL					5,704,012

**E2020 MOVABLE FURNISHINGS**

All movable furnishings to be provided and installed by owner						
SUBTOTAL						NIC

<b>TOTAL - FURNISHINGS</b>	<b>\$5,704,012</b>					
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BUILDING BACKUP - OPTION B.1

**F10 SPECIAL CONSTRUCTION**

**F10 SPECIAL CONSTRUCTION**

Pre-engineered Greenhouse

1

ls

150,000.00

150,000

SUBTOTAL

150,000

**TOTAL - SPECIAL CONSTRUCTION**

**\$150,000**

**F20 SELECTIVE BUILDING DEMOLITION**

**F2010 BUILDING ELEMENTS DEMOLITION**

Roof demolition

52,395

sf

5.00

261,975

Gut demolition

86,570

sf

10.00

865,700

Temporary shoring

1

ls

350,000.00

350,000

SUBTOTAL

1,477,675

**F2020 HAZARDOUS COMPONENTS ABATEMENT**

See main summary for HazMat allowance

See Summary

SUBTOTAL

**TOTAL - SELECTIVE BUILDING DEMOLITION**

**\$1,477,675**

SUBTOTAL

**\$274,448,126**



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SITEWORK B.1

<b>G SITEWORK</b>
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<b>G10</b>	<b>SITE PREPARATION &amp; DEMOLITION</b>	2,015,000	sf				
311000	GENERAL CONDITIONS						
	Mobilizations/Temp Parking/Etc.	1	ls	500,000.00	500,000		
	6' high site construction fence - perimeter	7,500	lf	18.00	135,000		
311000	SITE DEMOLITION AND RELOCATIONS						
	Demolish existing site conditions	1	ls	900,000.00	900,000		
311000	UTILITY DEMOLITION						
	Demolish existing utility lines	1	ls	250,000.00	250,000		
	Utility Support/Ground Improvements	1	ls	1,500,000.00	1,500,000		
311000	VEGETATION & TOPSOIL MANAGEMENT						
	Strip + dispose topsoil (swell 25%)	23,264	cy	37.00	860,768		
	Street sweeping allowance during hauling	1	ls	50,000.00	50,000		
311000	CLEAR GRASSY KNOLL						
	Remove trees/vegetation	1	ls	10,000.00	10,000		
	Strip + dispose topsoil	1,600	cy	37.00	59,200		
	Rock removal; mechanical	1,600	cy	85.00	136,000		
312000	EROSION & SEDIMENT CONTROL						
	Silt Fence; installation and removal	7,500	lf	12.00	90,000		
	Erosion Control monitoring & maintenance	1	ls	80,000.00	80,000		
312000	SITE EARTHWORK						
	<u>Site cut to design subgrade</u>	0	cy				
	Cut	0	cy	20.00			
	Store cut onsite					NR	
	Process cut and amend with additional soils for reuse					NR	
	Imported fill	4,100	cy	40.00	164,000		
	General rock removal	3,400	cy	85.00	289,000		
312000	SOIL DISPOSAL - conversion factor 1.7 to tons						
	Load excess soils for disposal						
	Less than RCS-1 - clean non-regulated	1	ls			NR	
312000	ESTABLISHING GRADE						
	Sub grade establishment	2,015,000	sf	0.15	302,250		
	Fine grading throughout the site	2,015,000	sf	0.25	503,750		
312000	HAZARDOUS MATERIALS						
	UST removal allowance					NR	
	Soil disposal & replacement allowance					See Summary	
	SUBTOTAL						5,829,968
<b>G20</b>	<b>SITE IMPROVEMENTS</b>						
	<b>Roadways and Parking Lots</b>						
	<u>Bituminous concrete pavement - standard</u>	264,000	sf				
	gravel base; 8" thick	20,411	cy	50.00	1,020,550		
	asphalt top; 1.5" thick	2,524	tns	200.00	504,800		
	asphalt binder; 2" thick	3,372	tns	190.00	640,680		
	<u>Porous Pavement</u>	66,000	sf				
	Choker course; 4" thick crushed stone	1,039	cy	75.00	77,925		
	Filter course; 8" thick gravel	2,047	cy	65.00	133,055		
	Reservoir course; 8" thick crushed stone	2,047	cy	55.00	112,585		
	Porous pavement; 4" thick	1,666	tns	400.00	666,400		
	Geotextiles to paving	330,000	sf	1.50	495,000		



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<b>SITEWORK B.1</b>							
320000	<b>CURBING</b>						
	Vertical granite curb	18,000	lf	55.00	990,000		
320000	<b>ROAD MARKINGS AND SIGNS</b>						
	Parking spot	470	ea	85.00	39,950		
	Parking spot ADA premium	45	ea	250.00	11,250		
	Pavement markings/signage allowance	1	ls	100,000.00	100,000		
	SUBTOTAL					4,792,195	
320000	<b>PEDESTRIAN PAVING</b>						
	<u>Concrete sidewalks</u>	115,000	sf				
	gravel base; 12" thick	5,324	cy	50.00	266,200		
	Broom finish concrete paving; 5" thick	115,000	sf	16.00	1,840,000		
	<u>Concrete pads</u>	1,500	sf				
	gravel base; 12" thick	104	cy	50.00	5,200		
	Broom finish concrete paving; 8" thick	1,500	sf	24.00	36,000		
	<u>Porous concrete pavers; 20% of Plaza</u>	9,000	sf				
	Open graded stone subbase AASHTO #2; 32" thick	1,113	cy	50.00	55,650		
	Open graded base AASHTO #57; 6" thick	208	cy	50.00	10,400		
	Open graded bedding course AASHTO #8; 2" thick	70	cy	65.00	4,550		
	Pavers	9,000	sf	28.00	252,000		
	Geotextiles on top, bottom and sides of subbase	10,000	sy	3.00	30,000		
	<u>Concrete paving; 80% of Plaza</u>	36,000	sf				
	gravel base; 12" thick	1,667	cy	50.00	83,350		
	Broom finish concrete paving; 5" thick	36,000	sf	18.00	648,000		
320000	<b>STAIRS AND RAMPS</b>						
	Ramp/stairs premium	1	ls	250,000.00	250,000		
	SUBTOTAL					3,481,350	
320000	<b>SITE IMPROVEMENTS</b>						
320000	<b>SITE FURNISHINGS</b>						
	Bollards/bike racks/benches/flag poles etc.	1	ls	1,000,000.00	1,000,000		
	New restroom/tickets/concessions building	1,000	sf	700.00	700,000		
320000	<b>EXISTING STADIUM + TRACK ETR</b>						No Costs Assumed
320000	<b>ATHLETIC FIELDS</b>						
	Grass fields; sod	360,000	sf				
	Varsity Baseball Diamond; C1	100,000	sf	6.00	600,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	60,000.00	60,000		
	Varsity Softball Diamond; C2	55,000	sf	6.00	330,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	30,000.00	30,000		
	Junior Varsity Baseball Diamond; C3 + Cricket	60,000	sf	6.00	360,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	50,000.00	50,000		
	Little League Diamond; C4	40,000	sf	6.00	240,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	30,000.00	30,000		
	Crumb football field; C5	60,000	sf	6.00	360,000		
	Worthen practice field; C6	45,000	sf	6.00	270,000		
	Tennis courts + Basketball courts						ETR



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SITEWORK B.1

320000	ATHLETIC EQUIPMENT						
	Equipment allowance	1	ls	180,000.00	180,000		
320000	BLEACHERS AND SCOREBOARDS						
	Bleachers + pressbox	1,000	seat	900.00	900,000		
	Electronic scoreboard; wireless controls, multiboard	1	ea	75,000.00	75,000		
	Electronic scoreboard; softball	1	ea	45,000.00	45,000		
320000	FENCING						
	Fencing allowance	1	ls	500,000.00	500,000		
	SUBTOTAL					6,090,000	

320000	SITE WALLS						
	Retaining walls/site walls/seat walls	1	ls	750,000.00	750,000		
	SUBTOTAL					750,000	

**Landscaping**

329900	LAWN AND SEED						
	Topsoil - imported 12" thick; swell 25%	15,741	cy	65.00	1,023,165		
	General Seeding	850,000	sf	0.50	425,000		
	Trees, Shrubs and Perennial planting area	1	ls	1,500,000.00	1,500,000		
	Courtyard	1	ls	150,000.00	150,000		
	IRRIGATION						
	Irrigation area at athletic fields	360,000	sf	1.50	540,000		
	Wetlands reconstruction				NR		
	SUBTOTAL					3,638,165	

**G30 CIVIL MECHANICAL UTILITIES**

210000	FIRE PROTECTION						
	12" CLDI	4,000	lf	150.00	600,000		
	8" CLDI	200	lf	100.00	20,000		
	6" CLDI	100	lf	95.00	9,500		
	Fire department connection	1	ea	2,500.00	2,500		
	Gate valve; hydrants	1	ls	60,000.00	60,000		
331000	CONNECTIONS						
	Connect to existing water line; 12" live tap	2	ea	15,000.00	30,000		
312000	EXCAVATION & BACKFILL						
	DI piping excavation/backfill (inside site)	4,300	lf	50.00	215,000		
	Pressure test & chlorinate	4,300	lf	7.50	32,250		
	Allowance for temporary water service	1	ea	25,000.00	25,000		
	Allowance for temporary support of existing utilities				NR		
	SUBTOTAL					994,250	

333000	SANITARY SEWER						
	PVC sewer pipe	1,980	lf	60.00	118,800		
	Sewer manholes	7	ea	6,000.00	42,000		
	Connection to existing	2	loc	15,000.00	30,000		
	Grease trap - 6,000 gal.	2	ea	35,000.00	70,000		
	SUBTOTAL					260,800	

334000	STORM DRAINAGE						
	Infiltration systems	11,000	sf	45.00	495,000		
	Hydrodynamic separators	5	ea	20,000.00	100,000		
	Storm systems; complete at parking; piping; CB + MH etc.	264,000	sf	10.00	2,640,000		
	<u>Sodded Athletic fields</u>						
	Drainage at field	360,000	sf	1.00	Included w/fields		
	SUBTOTAL					3,235,000	

**G40 ELECTRICAL UTILITIES**

	Concrete:						
	Primary duct bank 6-5" duct bank	900	lf	50.00	45,000		





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<b>SITEWORK B.1</b>							
	Secondary service 4000A - two services	200	lf	50.00	10,000		
	Generator duct bank	100	lf	40.00	4,000		
	PV 5000A secondary service (10) - 4"C	100	lf	60.00	6,000		
	Communications duct bank 6-4"	750	lf	40.00	30,000		
	Transformer/generator pad	6	ea	3,000.00	18,000		
	Site lighting pole bases	56	ea	500.00	28,000		
	Excavation and backfill:						
	Primary duct bank 2-5" duct bank	900	lf	25.00	22,500		
	Secondary service 4000A	200	lf	30.00	6,000		
	Storage building 400A service	40	lf	22.00	880		
	Generator duct bank	100	lf	30.00	3,000		
	PV 5000A secondary service (10) - 4"C	100	lf	45.00	4,500		
	EV conduits				See Below		
	Communications duct bank 4-4"	750	lf	25.00	18,750		
	Site lighting circuitry	5,200	lf	6.00	31,200		
	2-2" PVC to sports field lighting	1,200	lf	10.00	12,000		
	CCTV circuitry	1,200	lf	6.00	7,200		
	Scoreboard power & data, misc. sports field power, allow	1,000	lf	6.00	6,000		
	SUBTOTAL					253,030	
	<u>Power</u>						
	Site electrical 15 kVOLT- Transformers etc.	1	ls	2,500,000.00	By Owner		
	Utility co. back charges				Included above		
	Primary duct bank	900	lf	180.00	162,000		
	Electric manhole	6	ea	12,500.00	75,000		
	Transformers + 15kVolt switchgear by Owner				Included above		
	Secondary service 4000A	200	lf	1,400.00	280,000		
	Generator:						
	Generator service	100	lf	400.00	40,000		
	PV:						
	PV 5000A secondary service (10) - 4"C	400	lf	600.00	240,000		
	<u>Communications</u>						
	Connect to existing utility pole	1	ea	1,500.00	1,500		
	Communications duct bank	750	lf	150.00	112,500		
	Communication manhole	2	ea	12,500.00	25,000		
	<u>Site Lighting</u>						
	Allowance	360,000	sf	2.00	720,000		
	<u>EV Stations</u>						
	EV stations; single	20	loc	15,000.00	300,000		
	EV stations; EV ready; conduit only	75	loc	4,000.00	300,000		
	EV stations; EV ready; conduit + wiring	50	loc	7,000.00	350,000		
	<u>Sports Fields</u>						
	Sports field lighting, allow 1 baseball field; 1 softball field + rectangle field	2	loc	460,000.00	920,000		
	Fixture MUSCO				Included above		
	Sports field lighting circuitry	1,200	lf	12.00	Included above		
	Scoreboard power & data, misc. sports field power, allow	1	ls	10,000.00	Included above		
	Rough-in, allow	1	ls	35,000.00	Included above		
	<u>Site Demolition</u>						
	Site demolition work				Included w/ building		
	SUBTOTAL					3,526,000	
<b>TOTAL - SITE DEVELOPMENT</b>							<b>\$32,850,758</b>



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## CONSTRUCTION COST SUMMARY

BUILDING SYSTEM		SUB-TOTAL	TOTAL	\$/SF	%
<b>BUILDING SUMMARY - OPTION B.4</b>					
<b>A10</b>	<b>FOUNDATIONS</b>				
A1010	Standard Foundations	\$4,934,163			
A1020	Special Foundations	\$5,295,745			
A1030	Lowest Floor Construction	\$4,752,925	<b>\$14,982,833</b>	\$33.99	5.5%
<b>A20</b>	<b>BASEMENT CONSTRUCTION</b>				
A2010	Basement Excavation	\$0			
A2020	Basement Walls	\$0	<b>\$0</b>	\$0.00	0.0%
<b>B10</b>	<b>SUPERSTRUCTURE</b>				
B1010	Upper Floor Construction	\$11,959,981			
B1020	Roof Construction	\$8,333,684	<b>\$20,293,665</b>	\$46.04	7.5%
<b>B20</b>	<b>EXTERIOR CLOSURE</b>				
B2010	Exterior Walls	\$18,460,169			
B2020	Windows	\$8,008,751			
B2030	Exterior Doors	\$440,816	<b>\$26,909,736</b>	\$61.05	9.9%
<b>B30</b>	<b>ROOFING</b>				
B3010	Roof Coverings	\$9,943,819			
B3020	Roof Openings	\$54,000	<b>\$9,997,819</b>	\$22.68	3.7%
<b>C10</b>	<b>INTERIOR CONSTRUCTION</b>				
C1010	Partitions	\$19,786,516			
C1020	Interior Doors	\$5,399,528			
C1030	Specialties/Millwork	\$6,680,093	<b>\$31,866,137</b>	\$72.29	11.8%
<b>C20</b>	<b>STAIRCASES</b>				
C2010	Stair Construction	\$942,250			
C2020	Stair Finishes	\$260,000	<b>\$1,202,250</b>	\$2.73	0.4%
<b>C30</b>	<b>INTERIOR FINISHES</b>				
C3010	Wall Finishes	\$7,493,872			
C3020	Floor Finishes	\$7,317,140			
C3030	Ceiling Finishes	\$6,612,240	<b>\$21,423,252</b>	\$48.60	7.9%
<b>D10</b>	<b>CONVEYING SYSTEMS</b>				
D1010	Elevator	\$907,200	<b>\$907,200</b>	\$2.06	0.3%



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## CONSTRUCTION COST SUMMARY

BUILDING SYSTEM	SUB-TOTAL	TOTAL	\$/SF	%
<b>BUILDING SUMMARY - OPTION B.4</b>				
<b>D20 PLUMBING</b>				
D20 Plumbing	\$13,342,848	<b>\$13,342,848</b>	\$30.27	4.9%
<b>D30 HVAC</b>				
D30 HVAC	\$62,423,440	<b>\$62,423,440</b>	\$141.61	23.1%
<b>D40 FIRE PROTECTION</b>				
D40 Fire Protection	\$4,117,344	<b>\$4,117,344</b>	\$9.34	1.5%
<b>D50 ELECTRICAL</b>				
D5010 Complete System	\$48,268,144	<b>\$48,268,144</b>	\$109.50	17.8%
<b>E10 EQUIPMENT</b>				
E10 Equipment	\$5,111,385	<b>\$5,111,385</b>	\$11.60	1.9%
<b>E20 FURNISHINGS</b>				
E2010 Fixed Furnishings	\$5,656,412			
E2020 Movable Furnishings	NIC	<b>\$5,656,412</b>	\$12.83	2.1%
<b>F10 SPECIAL CONSTRUCTION</b>				
F10 Special Construction	\$1,850,000	<b>\$1,850,000</b>	\$4.20	0.7%
<b>F20 HAZMAT REMOVALS</b>				
F2010 Building Elements Demolition	\$2,269,735			
F2020 Hazardous Components Abatement	\$0	<b>\$2,269,735</b>	\$5.15	0.8%
<b>TOTAL DIRECT COST (Trade Costs)</b>		<b>\$270,622,200</b>	<b>\$613.91</b>	<b>100.0%</b>



PSR Options Cost Estimate

GFA

440,816

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**BUILDING BACKUP - OPTION B.4**

**GROSS FLOOR AREA CALCULATION**

Level 1	151,307
Level 2	74,265
Level 3	74,264
Heavy Renovation	140,980

**TOTAL GROSS FLOOR AREA (GFA)**

**440,816 sf**

**A10 FOUNDATIONS**

**A1010 STANDARD FOUNDATIONS**

Strip Footings: 1 x 3

Formwork	6,908	sf	15.00	103,620
Re-bar	45,593	lbs.	2.50	113,983
Concrete material	403	cy	160.00	64,480
Placing concrete	403	cy	120.00	48,360

Perimeter foundation walls: 20" Thick x 3.5 ft H

Formwork	24,178	sf	21.00	507,738
Re-bar	60,445	lbs.	2.50	151,113
Concrete material	785	cy	160.00	125,600
Placing concrete	785	cy	120.00	94,200
Form shelf	3,454	lf	8.00	27,632

Spread Footings: 9 x 9 x 2 (Three Story)

Formwork	27,216	sf	18.00	489,888
Re-bar	183,708	lbs.	2.50	459,270
Concrete material	2,381	cy	160.00	380,960
Placing concrete	2,381	cy	120.00	285,720
Set anchor bolts grout plates	378	ea	250.00	94,500

Spread Footings: 10 x 10 x 2 (Four Story)

Formwork		sf	18.00	
Re-bar		lbs.	2.50	
Concrete material		cy	160.00	
Placing concrete		cy	120.00	
Set anchor bolts grout plates		ea	250.00	

Piers

Formwork	378	ea		
Formwork	4,536	sf	24.00	108,864
Re-bar	51,030	lbs	2.50	127,575
Concrete material	176	cy	160.00	28,160
Placing concrete	176	cy	160.00	28,160
Housekeeping pads	1	ls	30,000.00	30,000

070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Dampproofing @ foundation wall	13,816	sf	4.00	55,264
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072100 THERMAL INSULATION

Rigid insulation to face of foundation wall; 4" R-20	13,816	sf	5.00	69,080
Brick Shelf 4" insulation	3,454	lf	20.00	69,080

312000 EARTHWORK

Strip footings

Excavation	3,838	cy	14.00	53,732
Reuse excess material on site	1,188	cy	15.00	17,820
Backfill with select fill	2,650	cy	25.00	66,250

Spread footings

Excavation	6,776	cy	14.00	94,864
Reuse excess material on site	2,557	cy	15.00	38,355
Backfill with select fill	4,219	cy	25.00	105,475

Miscellaneous

Foundation drain	3,454	lf	30.00	103,620
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PSR Options Cost Estimate

GFA

440,816

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**BUILDING BACKUP - OPTION B.4**

New brick ledge tied to existing foundation wall	2,186	lf	200.00	437,200		
Excavation + backfill to expose existing foundations	1,295	cy	80.00	103,600		
New foundations in existing building for bracing etc.	1	ls	200,000.00	200,000		
Temporary dewatering for foundation work	1	ls	250,000.00	250,000		
SUBTOTAL						4,934,163

**A1020 SPECIAL FOUNDATIONS**

Rigid inclusions	151,307	sf	35.00	5,295,745		
SUBTOTAL						5,295,745

**A1030 LOWEST FLOOR CONSTRUCTION**

**033000 CONCRETE**

Vapor barrier, 15mils	151,307	sf	1.25	189,134		
Slab on grade	151,307	sf				
WWF reinforcement	174,003	sf	1.85	321,906		
Concrete - 5" thick	2,413	cy	170.00	410,210		
Placing concrete	2,413	cy	65.00	156,845		
Finishing and curing concrete	151,307	sf	3.00	453,921		
Control joints - saw cut	151,307	sf	0.10	15,131		
Miscellaneous						
Patch existing floors	115,000	sf	5.00	575,000		
Equipment pads	1	ls	30,000.00	30,000		
Loading dock	1	ls	50,000.00	50,000		
Elevator pits	3	ea	40,000.00	120,000		
Radon system					Excluded; NR	

**072100 THERMAL INSULATION**

Perimeter insulation, 4" thick R-20 - 6ft at perimeter	20,724	sf	5.00	103,620		
Under slab insulation, 2" thick under slab	130,583	sf	3.00	391,749		

**312000 EARTHWORK**

Gravel base, 12"	5,604	cy	45.00	252,180		
Structural fill	19,600	cy	55.00	1,078,000		
Allowance for underslab drainage	151,307	sf	2.00	302,614		
Compact existing sub-grade	151,307	sf	0.50	75,654		
Underslab E&B for plumbing	151,307	sf	1.50	226,961		
SUBTOTAL						4,752,925

**TOTAL - FOUNDATIONS**

**\$14,982,833**

**A20 BASEMENT CONSTRUCTION**

**A2010 BASEMENT EXCAVATION**

No Work in this section						
SUBTOTAL						-

**A2020 BASEMENT WALLS**

No Work in this section						
SUBTOTAL						-

**TOTAL - BASEMENT CONSTRUCTION**

**B10 SUPERSTRUCTURE**

**B1010 FLOOR CONSTRUCTION**

9.9 lbs/sf  
2,177 tns including canopies + roof screens  
\$6,809 \$/Ton

**033000 CONCRETE**

WWF reinforcement	170,808	sf	1.85	315,995		
Concrete Fill to metal deck; lightweight, total thickness 6 1/4"	3,004	cy	190.00	570,760		
Place and finish concrete	148,529	sf	3.00	445,587		
Rebar to decks	44,559	lbs	2.00	89,118		

**051200 STRUCTURAL STEEL FRAMING**

Structural steel framing; Complete; 15 lbs per SF	1,114	tns	5,000.00	5,570,000		
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PSR Options Cost Estimate

GFA

440,816

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>BUILDING BACKUP - OPTION B.4</b>							
	Steel premium for lateral system due to poor soils; 1 PSF	74	tns	5,000.00	370,000		
	New bracing steel at existing; 1 PSF	70	tns	8,000.00	560,000		
	Moment connections	56	ea	750.00	42,000		
	Shear studs	37,132	ea	3.50	129,962		
	3" metal galvanized floor deck	148,529	sf	8.00	1,188,232		
	Expansion joints	1	ls	100,000.00	100,000		
	Seismic upgrades	140,980	sf	10.00	1,409,800		
078100	<b>FIREPROOFING/FIRESTOPPING</b>						
	Fire proofing to columns and beams; 2 hr	289,509	sf	3.00	868,527		
	Intumescent paint @ architecturally exposed beams and columns - allow	1	ls	300,000.00	300,000		
	<b>SUBTOTAL</b>					11,959,981	
<b>B1020 ROOF CONSTRUCTION</b>							
033000	<b>CONCRETE</b>						
	6" Normal weight concrete deck at low roof and at mechanical equipment pads	35,000	sf	9.00	315,000		
051200	<b>STRUCTURAL STEEL FRAMING</b>						
	Structural steel framing; Complete; 13 lbs per SF	983	tns	5,000.00	4,915,000		
	Structural steel framing; 2 lbs per SF premium at RTU's	35	tns	4,800.00	168,000		
	Steel premium for lateral system due to poor soils; 1 PSF	76	tns	5,000.00	380,000		
	Roof screens	80	tns	5,500.00	440,000		
	<b>Decking</b>						
	1 1/2" galvanized metal deck, typical	151,307	sf	7.00	1,059,149		
078100	<b>FIREPROOFING/FIRESTOPPING</b>						
	Fireproofing to columns, beams and deck; 1 hr - includes Intumescent	151,307	sf	5.00	756,535		
	Intumescent paint @ architecturally exposed beams and columns - allow	1	ls	300,000.00	300,000		
	<b>SUBTOTAL</b>					8,333,684	
<b>TOTAL - SUPERSTRUCTURE</b>							<b>\$20,293,665</b>

**B20 EXTERIOR CLOSURE**

**B2010 EXTERIOR WALLS**  
**Exterior Wall Area**

146,649 Total closure area  
91,087 sf total area solid

042000	<b>MASONRY</b>						
	Mockup	1	ls	100,000.00	100,000		
	Brick veneer; 60% of Solid	35,752	sf	44.00	1,573,088		
	Repoint existing brick	18,900	sf	45.00	850,500		
	Granite veneer base; 2%	1,822	sf	120.00	218,640		
	4" CMU wall at auditorium	9,000	sf	30.00	270,000		
	Precast trim allowance	1	ls	1,000,000.00	1,000,000		
	8" Mineral wool at exterior closure (2 layers 4")	91,087	sf	7.50	683,153		
	Miscellaneous flashings and sealants	91,087	sf	1.50	136,631		
	Staging to exterior wall	91,087	sf	4.00	364,348		
055000	<b>MISC. METALS</b>						
	Misc. metals at masonry including loose lintels (relieving angles included in steel tns)	35,752	sf	1.50	53,628		
070001	<b>WATERPROOFING, DAMPPROOFING AND CAULKING</b>						
	Air barrier	91,087	sf	10.00	910,870		
	Miscellaneous sealants to closure	91,087	sf	1.00	91,087		
072100	<b>THERMAL INSULATION</b>						
	4" cellulose insulation in stud	91,087	sf	3.25	296,033		
	Insulation at glazed openings	12,221	lf	6.00	73,326		



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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**BUILDING BACKUP - OPTION B.4**

076400 CLADDING

Composite metal panel, Alucobond or equal; 18%	16,396	sf	100.00	1,639,600		
Terracotta; 20%	37,117	sf	160.00	5,938,720		
Canopies; soffit + framing	4,000	sf	100.00	400,000		
12' high Acoustic Equipment Screen	16,000	sf	95.00	1,520,000		

EXPANSION JOINT COVERS

Thermal breaks	1	ls	50,000.00	50,000		
Expansion joints	1	ls	100,000.00	100,000		

092900 GYPSUM BOARD ASSEMBLIES

Exterior wall;						
6" Stud backup	91,087	sf	16.00	1,457,392		
Gypsum Sheathing	91,087	sf	3.50	318,805		
Drywall lining to interior face of stud backup	91,087	sf	4.00	364,348		

Passive house premium NR

101400 SIGNAGE

Exterior signage - allowance	1	ls	50,000.00	50,000		
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SUBTOTAL 18,460,169

**B2020 WINDOWS**

Exterior Wall Area 36,662 sf

061000 ROUGH CARPENTRY

Wood blocking at openings	12,221	lf	10.00	122,210		
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070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Air barrier/flashing at windows	12,221	lf	10.00	122,210		
Backer rod & double sealant	12,221	lf	11.00	134,431		

080001 METAL WINDOWS

Aluminum windows, triple glazed including interior and exterior trim per details	18,331	sf	175.00	3,207,925		
Curtainwall, triple glazed including allowance for interior and exterior trim details	18,331	sf	225.00	4,124,475		
Horizontal aluminum fin sunshades @ 40% of windows, custom color	1,700	lf	175.00	297,500		

Passive house premium NR

089000 LOUVERS

Louvers					N/A	
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SUBTOTAL 8,008,751

**B2030 EXTERIOR DOORS**

Allowance for exterior doors	440,816	gsf	1.00	440,816		
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SUBTOTAL 440,816

**TOTAL - EXTERIOR CLOSURE**

**\$26,909,736**

**B30 ROOFING**

055000 MISCELLANEOUS METALS

Terrace top rail/ladders/stairs	1	ls	80,000.00	80,000		
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061000 ROUGH CARPENTRY

Rough carpentry and blocking @ roof	253,294	sf	1.50	379,941		
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070002 ROOFING AND FLASHING

PVC roof membrane system, white or gray, 1/2" coverboard, 10" polyiso insulation, vapor barrier	253,294	sf	33.00	8,358,702		
Canopy roofing	4,000	sf	28.00	112,000		



PSR Options Cost Estimate

GFA

440,816

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**BUILDING BACKUP - OPTION B.4**

Plaza deck pavers system at terrace

NR

Miscellaneous Roofing

Miscellaneous flashings/copings/walkway pads etc.

253,294

sf

4.00

1,013,176

SUBTOTAL

9,943,819

**B3020 ROOF OPENINGS**

*086300 ROOF SKYLIGHTS*

Aluminum framed skylight (4loc)

None Assumed

Smoke vents; 7'x7'

3

ea

18,000.00

54,000

SUBTOTAL

54,000

**TOTAL - ROOFING**

**\$9,997,819**

**C10 INTERIOR CONSTRUCTION**

**C1010 PARTITIONS**

*040001 MASONRY*

Allowance for masonry partitions

440,816

gsf

6.00

2,644,896

*061000 ROUGH CARPENTRY*

Backer panels in electrical closets

1

ls

10,000.00

10,000

Wood blocking at interiors

440,816

gsf

0.50

220,408

*078400 FIREPROOFING/FIRESTOPPING*

Fire stopping including slab edges and core

440,816

gsf

1.00

440,816

*070001 WATERPROOFING, DAMPPROOFING AND CAULKING*

Miscellaneous sealants throughout building

440,816

gsf

1.25

551,020

*078150 EXPANSION JOINTS*

Allowance for expansion joint covers

1

ls

50,000.00

50,000

*081110 INTERIOR GLAZING*

Allowance for interior glazing

440,816

gsf

3.00

1,322,448

*092900 GYPSUM BOARD ASSEMBLIES*

Allowance for GWB partitions

440,816

gsf

33.00

14,546,928

SUBTOTAL

19,786,516

**C1020 INTERIOR DOORS**

Doors, frames, hardware; complete

440,816

gsf

8.00

3,526,528

Fire shutters

1

ls

150,000.00

150,000

Security doors

16

loc

25,000.00

400,000

Premium for electronic hardware

882

set

1,500.00

1,323,000

SUBTOTAL

5,399,528

**C1030 SPECIALTIES / MILLWORK**

*055000 MISCELLANEOUS METALS*

Miscellaneous metals throughout building

440,816

gsf

5.00

2,204,080

*061000 ROUGH CARPENTRY*

*062000 INTERIOR ARCHITECTURAL WOODWORK*

Interior millwork package

440,816

gsf

3.00

1,322,448

*101100 VISUAL DISPLAY SURFACES*

Markerboard and tackboard package

440,816

gsf

2.00

881,632

*101400 SIGNAGE*

Room identification, directional & safety signage, building directory + environmental graphics

440,816

gsf

2.00

881,632

*102800 TOILET ACCESSORIES*





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440,816

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>BUILDING BACKUP - OPTION B.4</b>							
	Toilet accessories/compartments	440,816	gsf	1.00	440,816		
104400	FIRE PROTECTION SPECIALTIES						
	Fire extinguisher cabinets	1	ls	65,852.71	65,853		
	AED cabinets	1	ls	2,000.00	2,000		
105000	LOCKERS						
	Student lockers	440,816	gsf	2.00	881,632		
	SUBTOTAL					6,680,093	
<b>TOTAL - INTERIOR CONSTRUCTION</b>							<b>\$31,866,137</b>

**C20 STAIRCASES**

**C2010 STAIR CONSTRUCTION**

033000	CONCRETE						
	Concrete to stairs	13	flt	5,000.00	65,000		
055000	MISCELLANEOUS METALS						
	Egress stairs w/ stainless steel rails and handrails	10	flt	50,000.00	500,000		
	Projection room stair, 4' wide	1	flt	40,000.00	40,000		
	Learning stair						
	Stainless steel guardrail	65	lf	425.00	27,625		
	Stainless steel handrail	55	lf	175.00	9,625		
	Adjacent stairs; 5'-3" wide	2	flt	75,000.00	150,000		
	Learning stair framing						
	Framing at learning stair - premium	1	ls	150,000.00	150,000		
	SUBTOTAL					942,250	

**C2020 STAIR FINISHES**

090005	RESILIENT FLOORS						
	Stair finishes	13	flts	20,000.00	260,000		
	SUBTOTAL					260,000	

**TOTAL - STAIRCASES**

**\$1,202,250**

**C30 INTERIOR FINISHES**

**C3010 WALL FINISHES**

	Wall finishes complete package	440,816	gsf	17.00	7,493,872		
	SUBTOTAL					7,493,872	

**C3020 FLOOR FINISHES**

	Floor finishes complete package	440,816	gsf	15.00	6,612,240		
	Floor prep at existing	140,980	sf	5.00	704,900		
	SUBTOTAL					7,317,140	

**C3030 CEILING FINISHES**

	Ceiling finishes complete package	440,816	gsf	15.00	6,612,240		
	SUBTOTAL					6,612,240	

**TOTAL - INTERIOR FINISHES**

**\$21,423,252**

**D10 CONVEYING SYSTEMS**

**D1010 ELEVATOR**

055000	MISCELLANEOUS METALS						
	Pit ladder and miscellaneous metals	3	ea	900.00	2,700		
	Sill angles	3	ls	1,500.00	4,500		
142100	ELEVATOR						
	Electric traction elevator, 3 stop, 5,000lbs	3	ea	300,000.00	900,000		



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**BUILDING BACKUP - OPTION B.4**

SUBTOTAL

907,200

<b>TOTAL - CONVEYING SYSTEMS</b>	<b>\$907,200</b>
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**D20 PLUMBING**

**D20 PLUMBING, GENERALLY**

Air source heat pump water heater (2) 500MBH

1

ls

1,000,000.00

1,000,000

Plumbing package complete

440,816

gsf

28.00

12,342,848

SUBTOTAL

13,342,848

<b>TOTAL - PLUMBING</b>	<b>\$13,342,848</b>
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**D30 HVAC**

**D30 HVAC, GENERALLY**

Geothermal Wells 800' well

350

wells

65,000.00

22,750,000

HVAC System; Water Source Heat Pump

440,816

gsf

90.00

39,673,440

SUBTOTAL

62,423,440

<b>TOTAL - HVAC</b>	<b>\$62,423,440</b>
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**D40 FIRE PROTECTION**

**D40 FIRE PROTECTION, GENERALLY**

Fire Equipment

Fire pump with controller 750GPM, incl Jockey pump with controller

1

ea

150,000.00

150,000

Sprinkler system; complete

440,816

gsf

9.00

3,967,344

SUBTOTAL

4,117,344

<b>TOTAL - FIRE PROTECTION</b>	<b>\$4,117,344</b>
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**D50 ELECTRICAL**

**D5010 ELECTRICAL SYSTEMS**

**Gear & Distribution**

Normal power distribution system

4000A 277/480V main switchboard

2

ea

185,000.00

370,000

Panelboards/feeders

440,816

gsf

8.00

3,526,528

Emergency power

Emergency Generator; 1250 kW Diesel

1

ls

812,500.00

812,500

Emergency power feeders

440,816

gsf

3.00

1,322,448

Photovoltaic - 3500 kW

PV system equipment; roof top

139,312

sf

36.00

5,015,232

PV system equipment; canopy

93,060

sf

60.00

5,583,600

Battery Storage

1

ls

2,500,000

2,500,000

Transparent + opaque vertical cladding BIPV

sf

200.00

N/A

Equipment Wiring

Feeders + Electrical to equipment

440,816

gsf

10.00

4,408,160

SUBTOTAL

23,538,468

**D5020 LIGHTING & POWER**

Lighting, Controls + Power

440,816

gsf

18.00

7,934,688

SUBTOTAL

7,934,688

**D5030 COMMUNICATION & SECURITY SYSTEMS**

Telecommunications/PA + Clock

440,816

gsf

4.00

1,763,264

Performance lighting

Theater AV

1

ls

200,000.00

200,000

Stage lighting fixture package

1

ls

250,000.00

250,000

Audio Visual Systems

440,816

gsf

9.50

4,187,752

Classroom speech + AV

225

rms

5,000.00

1,125,000

Specialty Communications Systems



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**BUILDING BACKUP - OPTION B.4**

BDA system, antenna and annunciator	440,816	sf	0.65	286,530		
Cell repeater/Distributed antenna system, not specified	440,816	sf	1.00	440,816		
Emergency 2 way communication system at elevator lobbies +stairs	1	ls	100,000.00	100,000		
<u>Fire Alarm</u>	440,816	gsf	4.00	1,763,264		
<u>Security System</u>	440,816	gsf	10.00	4,408,160		
SUBTOTAL						14,524,786

**D5040 OTHER ELECTRICAL SYSTEMS**

<u>Common Work Results for Electrical</u>						
Lightning prevention	440,816	gsf	0.30	132,245		
Grounding	440,816	gsf	0.40	176,326		
Misc. demolition work	440,816	gsf	0.25	110,204		
Temp power and lights	440,816	gsf	1.20	528,979		
Seismic restraints/Coordination/misc.	440,816	gsf	3.00	1,322,448		
SUBTOTAL						2,270,202

<b>TOTAL - ELECTRICAL</b>	<b>\$48,268,144</b>
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**E10 EQUIPMENT**

**E10 EQUIPMENT, GENERALLY**

112000	LOADING DOCK EQUIPMENT					
	Loading dock leveler(2), truck restraints (2) and bumpers	1	ls	50,000.00	50,000	
110620	THEATRICAL EQUIPMENT					
	Allowance per Architect					
	Stage lighting and fixtures - equipment only	1	ls	358,000.00	358,000	
	Stage rigging, installed	1	ls	275,000.00	275,000	
	Stage curtains, installed	1	ls	88,385.00	88,385	
	Forestage Platforms, installed	1	ls	100,000.00	100,000	
	Orchestra Enclosure, installed	1	ls	175,000.00	175,000	
	Orchestra Pit Lift	1	ls	150,000.00	150,000	
	Auditorium AV Equipment				See Electrical	
113100	APPLIANCES					
	Residential appliances - allowance	1	ls	60,000.00	60,000	
114000	FOOD SERVICE EQUIPMENT					
	Kitchen equipment	1	ls	2,500,000.00	2,500,000	
115300	EDUCATIONAL EQUIPMENT					
	Science equipment;	1	ls	400,000.00	400,000	
	Kiln	1	ea	5,000.00	5,000	
	Allowance for miscellaneous equipment	1	ls	50,000	50,000	
116600	GYM EQUIPMENT					
	Gym Equipment	1	ls	500,000.00	500,000	
126000	SEATING					
	Auditorium seating	1,000	seat	400.00	400,000	
	SUBTOTAL					5,111,385

<b>TOTAL - EQUIPMENT</b>	<b>\$5,111,385</b>
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**E20 FURNISHINGS**

**E2010 FIXED FURNISHINGS**

122100	WINDOW TREATMENT					
	Window shades at exterior glazing including blackout shades at art & science classrooms - allowance	36,662	sf	10.00	366,620	
123553	CASEWORK					
	Casework package	440,816	gsf	12.00	5,289,792	
	SUBTOTAL					5,656,412



PSR Options Cost Estimate

GFA

440,816

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**BUILDING BACKUP - OPTION B.4**

**E2020 MOVABLE FURNISHINGS**

All movable furnishings to be provided and installed by owner

SUBTOTAL

NIC

<b>TOTAL - FURNISHINGS</b>	<b>\$5,656,412</b>
----------------------------	--------------------

**F10 SPECIAL CONSTRUCTION**

**F10 SPECIAL CONSTRUCTION**

Temporary kitchen

1

ls

500,000.00

500,000

Temporary dining; tent structure

12,000

sf

100.00

1,200,000

Pre-engineered Greenhouse

1

ls

150,000.00

150,000

SUBTOTAL

1,850,000

<b>TOTAL - SPECIAL CONSTRUCTION</b>	<b>\$1,850,000</b>
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**F20 SELECTIVE BUILDING DEMOLITION**

**F2010 BUILDING ELEMENTS DEMOLITION**

Roof demolition

101,987

sf

5.00

509,935

Gut demolition

140,980

sf

10.00

1,409,800

Temporary shoring

1

ls

350,000.00

350,000

SUBTOTAL

2,269,735

**F2020 HAZARDOUS COMPONENTS ABATEMENT**

See main summary for HazMat allowance

See Summary

SUBTOTAL

<b>TOTAL - SELECTIVE BUILDING DEMOLITION</b>	<b>\$2,269,735</b>
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**SUBTOTAL**

**\$270,622,200**



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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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SITEWORK B.4

**G SITEWORK**

<b>G10</b>	<b>SITE PREPARATION &amp; DEMOLITION</b>	<b>2,015,000</b>	<b>sf</b>				
<b>311000</b>	<b>GENERAL CONDITIONS</b>						
	Mobilizations/Temp Parking/Etc.	<b>1</b>	ls	500,000.00	500,000		
	6' high site construction fence - perimeter	<b>7,500</b>	lf	18.00	135,000		
<b>311000</b>	<b>SITE DEMOLITION AND RELOCATIONS</b>						
	Demolish existing site conditions	<b>1</b>	ls	900,000.00	900,000		
<b>311000</b>	<b>UTILITY DEMOLITION</b>						
	Demolish existing utility lines	<b>1</b>	ls	250,000.00	250,000		
	Utility Support/Ground Improvements	<b>1</b>	ls	1,500,000.00	1,500,000		
<b>311000</b>	<b>VEGETATION &amp; TOPSOIL MANAGEMENT</b>						
	Strip + dispose topsoil (swell 25%)	<b>23,264</b>	cy	37.00	860,768		
	Street sweeping allowance during hauling	<b>1</b>	ls	50,000.00	50,000		
<b>311000</b>	<b>CLEAR GRASSY KNOLL</b>						
	Remove trees/vegetation	<b>1</b>	ls	10,000.00	10,000		
	Strip + dispose topsoil	<b>1,600</b>	cy	37.00	59,200		
	Rock removal; mechanical	<b>1,600</b>	cy	85.00	136,000		
<b>312000</b>	<b>EROSION &amp; SEDIMENT CONTROL</b>						
	Silt Fence; installation and removal	<b>7,500</b>	lf	12.00	90,000		
	Erosion Control monitoring & maintenance	<b>1</b>	ls	80,000.00	80,000		
<b>312000</b>	<b>SITE EARTHWORK</b>						
	<u>Site cut to design subgrade</u>	<b>0</b>	cy				
	Cut	<b>0</b>	cy	20.00			
	Store cut onsite					NR	
	Process cut and amend with additional soils for reuse					NR	
	Imported fill	<b>4,100</b>	cy	40.00	164,000		
<b>312000</b>	<b>SOIL DISPOSAL - conversion factor 1.7 to tons</b>						
	Load excess soils for disposal						
	Less than RCS-1 - clean non-regulated	<b>1</b>	ls		NR		
<b>312000</b>	<b>ESTABLISHING GRADE</b>						
	Sub grade establishment	<b>2,015,000</b>	sf	0.15	302,250		
	Fine grading throughout the site	<b>2,015,000</b>	sf	0.25	503,750		
	General rock removal	<b>3,400</b>	cy	85.00	289,000		
<b>312000</b>	<b>HAZARDOUS MATERIALS</b>						
	UST removal allowance					NR	
	Soil disposal & replacement allowance					See Summary	
	SUBTOTAL						5,829,968
<b>G20</b>	<b>SITE IMPROVEMENTS</b>						
	<b>Roadways and Parking Lots</b>						
	<u>Bituminous concrete pavement - standard</u>	<b>240,000</b>	<b>sf</b>				
	gravel base; 8" thick	<b>18,556</b>	cy	50.00	927,800		
	asphalt top; 1.5" thick	<b>2,294</b>	tns	200.00	458,800		
	asphalt binder; 2" thick	<b>3,065</b>	tns	190.00	582,350		
	<u>Porous Pavement</u>	<b>60,000</b>	<b>sf</b>				
	Choker course; 4" thick crushed stone	<b>944</b>	cy	75.00	70,800		
	Filter course; 8" thick gravel	<b>1,861</b>	cy	65.00	120,965		
	Reservoir course; 8" thick crushed stone	<b>1,861</b>	cy	55.00	102,355		
	Porous pavement; 4" thick	<b>1,514</b>	tns	400.00	605,600		
	Geotextiles to paving	<b>300,000</b>	sf	1.50	450,000		
<b>320000</b>	<b>CURBING</b>						



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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>SITEWORK B.4</b>							
	Vertical granite curb	14,500	lf	55.00	797,500		
320000	ROAD MARKINGS AND SIGNS						
	Parking spot	470	ea	85.00	39,950		
	Parking spot ADA premium	45	ea	250.00	11,250		
	Pavement markings/signage allowance	1	ls	100,000.00	100,000		
	SUBTOTAL					4,267,370	
320000	PEDESTRIAN PAVING						
	Concrete sidewalks	115,000	sf				
	gravel base; 12" thick	5,324	cy	50.00	266,200		
	Broom finish concrete paving; 5" thick	115,000	sf	16.00	1,840,000		
	Concrete pads	1,500	sf				
	gravel base; 12" thick	104	cy	50.00	5,200		
	Broom finish concrete paving; 8" thick	1,500	sf	24.00	36,000		
	Porous concrete pavers; 20% of Plaza	14,000	sf				
	Open graded stone subbase AASHTO #2; 32" thick	1,731	cy	50.00	86,550		
	Open graded base AASHTO #57; 6" thick	324	cy	50.00	16,200		
	Open graded bedding course AASHTO #8; 2" thick	108	cy	65.00	7,020		
	Pavers	14,000	sf	28.00	392,000		
	Geotextiles on top, bottom and sides of subbase	3,111	sy	3.00	9,333		
	Concrete paving; 80% of Plaza	56,000	sf				
	gravel base; 12" thick	2,593	cy	50.00	129,650		
	Broom finish concrete paving; 5" thick	56,000	sf	18.00	1,008,000		
320000	STAIRS AND RAMPS						
	Ramp/stairs premium	1	ls	250,000.00	250,000		
	SUBTOTAL					4,046,153	
320000	SITE IMPROVEMENTS						
320000	SITE FURNISHINGS						
	Bollards/bike racks/benches/flag poles etc.	1	ls	1,000,000.00	1,000,000		
	New restroom/tickets/concessions building	1,000	sf	700.00	700,000		
320000	EXISTING STADIUM + TRACK ETR					No Costs Assumed	
320000	ATHLETIC FIELDS						
	Grass fields; sod	360,000	sf				
	Varsity Baseball Diamond; C1	100,000	sf	6.00	600,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	60,000.00	60,000		
	Varsity Softball Diamond; C2	55,000	sf	6.00	330,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	30,000.00	30,000		
	Junior Varsity Baseball Diamond; C3 + Cricket	60,000	sf	6.00	360,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	50,000.00	50,000		
	Little League Diamond; C4	40,000	sf	6.00	240,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	30,000.00	30,000		
	Crumb football field; C5	60,000	sf	6.00	360,000		
	Worthen practice field; C6	45,000	sf	6.00	270,000		
	Tennis courts + Basketball courts					ETR	
320000	ATHLETIC EQUIPMENT						



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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>SITEWORK B.4</b>							
	Equipment allowance	1	ls	180,000.00	180,000		
320000	<b>BLEACHERS AND SCOREBOARDS</b>						
	Bleachers + pressbox	1,000	seat	900.00	NIC		
	Electronic scoreboard; wireless controls, multiboard	1	ea	75,000.00	NIC		
	Electronic scoreboard; softball	1	ea	45,000.00	NIC		
320000	<b>FENCING</b>						
	Fencing allowance	1	ls	500,000.00	500,000		
	SUBTOTAL					5,070,000	
320000	<b>SITE WALLS</b>						
	Retaining walls/site walls/seat walls	1	ls	750,000.00	750,000		
	SUBTOTAL					750,000	
	<b>Landscaping</b>						
329900	<b>LAWN AND SEED</b>						
	Topsoil - imported 12" thick; swell 25%	15,741	cy	65.00	1,023,165		
	General Seeding	850,000	sf	0.50	425,000		
	Trees, Shrubs and Perennial planting area	1	ls	1,500,000.00	1,500,000		
	Courtyard	1	ls	150,000.00	150,000		
	<b>IRRIGATION</b>						
	Irrigation area	360,000	sf	1.50	540,000		
	Wetlands reconstruction	28,500	sf	20.00	NR		
	SUBTOTAL					3,638,165	
<b>G30</b>	<b>CIVIL MECHANICAL UTILITIES</b>						
210000	<b>FIRE PROTECTION</b>						
	12" CLDI	4,000	lf	150.00	600,000		
	8" CLDI	200	lf	100.00	20,000		
	6" CLDI	100	lf	95.00	9,500		
	Fire department connection	1	ea	2,500.00	2,500		
	Gate valve; hydrants	1	ls	60,000.00	60,000		
331000	<b>CONNECTIONS</b>						
	Connect to existing water line; 12" live tap	2	ea	15,000.00	30,000		
312000	<b>EXCAVATION &amp; BACKFILL</b>						
	DI piping excavation/backfill (inside site)	4,300	lf	50.00	215,000		
	Pressure test & chlorinate	4,300	lf	7.50	32,250		
	Allowance for temporary water service	1	ea	25,000.00	25,000		
	Allowance for temporary support of existing utilities				NR		
	SUBTOTAL					994,250	
333000	<b>SANITARY SEWER</b>						
	PVC sewer pipe	1,800	lf	60.00	108,000		
	Sewer manholes	7	ea	6,000.00	42,000		
	Connection to existing	2	loc	15,000.00	30,000		
	Grease trap - 6,000 gal.	2	ea	35,000.00	70,000		
	SUBTOTAL					250,000	
334000	<b>STORM DRAINAGE</b>						
	Infiltration systems	11,500	sf	45.00	517,500		
	Hydrodynamic separators	5	ea	20,000.00	100,000		
	Storm systems; complete at parking; piping; CB + MH etc.	240,000	sf	10.00	2,400,000		
	<u>Sodded Athletic fields</u>						
	Drainage at field	360,000	sf	1.00	Included w/fields		
	SUBTOTAL					3,017,500	
<b>G40</b>	<b>ELECTRICAL UTILITIES</b>						
	Concrete:						
	Primary duct bank 6-5" duct bank	900	lf	50.00	45,000		
	Secondary service 4000A - two services	200	lf	50.00	10,000		
	Generator duct bank	100	lf	40.00	4,000		



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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>SITEWORK B.4</b>							
	PV 5000A secondary service (10) - 4"C	100	lf	60.00	6,000		
	Communications duct bank 6-4"	750	lf	40.00	30,000		
	Transformer/generator pad	6	ea	3,000.00	18,000		
	Site lighting pole bases	56	ea	500.00	28,000		
	Excavation and backfill:						
	Primary duct bank 2-5" duct bank	900	lf	25.00	22,500		
	Secondary service 4000A	200	lf	30.00	6,000		
	Storage building 400A service	40	lf	22.00	880		
	Generator duct bank	100	lf	30.00	3,000		
	PV 5000A secondary service (10) - 4"C	100	lf	45.00	4,500		
	EV conduits				See Below		
	Communications duct bank 4-4"	750	lf	25.00	18,750		
	Site lighting circuitry	5,200	lf	6.00	31,200		
	2-2" PVC to sports field lighting	1,200	lf	10.00	12,000		
	CCTV circuitry	1,200	lf	6.00	7,200		
	Scoreboard power & data, misc. sports field power, allow	1,000	lf	6.00	6,000		
	SUBTOTAL					253,030	
	<u>Power</u>						
	<b>Site electrical 15 kVOLT- Transformers etc.</b>	1	ls	2,500,000.00	By Owner		
	Utility co. back charges				Included above		
	Primary duct bank	900	lf	180.00	162,000		
	Electric manhole	6	ea	12,500.00	75,000		
	Transformers + 15kVolt switchgear by Owner				Included above		
	Secondary service 4000A	200	lf	1,400.00	280,000		
	Generator:						
	Generator service	100	lf	400.00	40,000		
	PV:						
	PV 5000A secondary service (10) - 4"C	400	lf	600.00	240,000		
	<u>Communications</u>						
	Connect to existing utility pole	1	ea	1,500.00	1,500		
	Communications duct bank	750	lf	150.00	112,500		
	Communication manhole	2	ea	12,500.00	25,000		
	<u>Site Lighting</u>						
	Allowance	360,000	sf	2.00	720,000		
	<u>EV Stations</u>						
	EV stations; single	20	loc	15,000.00	300,000		
	EV stations; EV ready; conduit only	75	loc	4,000.00	300,000		
	EV stations; EV ready; conduit + wiring	50	loc	7,000.00	350,000		
	<u>Sports Fields</u>						
	Sports field lighting, allow 1 baseball field; 1 softball field + rectangle field	2	loc	460,000.00	920,000		
	Fixture MUSCO				Included above		
	Sports field lighting circuitry	1,200	lf	12.00	Included above		
	Scoreboard power & data, misc. sports field power, allow	1	ls	10,000.00	Included above		
	Rough-in, allow	1	ls	35,000.00	Included above		
	<u>Site Demolition</u>						
	Site demolition work				Included w/ building		
	SUBTOTAL					3,526,000	
<b>TOTAL - SITE DEVELOPMENT</b>							<b>\$31,642,436</b>





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PSR Options Cost Estimate

GFA 440,816

## CONSTRUCTION COST SUMMARY

BUILDING SYSTEM	SUB-TOTAL	TOTAL	\$/SF	%
<b>BUILDING SUMMARY - OPTION C.1.d</b>				
<b>A10 FOUNDATIONS</b>				
A1010 Standard Foundations	\$4,402,553			
A1020 Special Foundations	\$5,934,250			
A1030 Lowest Floor Construction	\$5,472,417	<b>\$15,809,220</b>	\$35.86	5.7%
<b>A20 BASEMENT CONSTRUCTION</b>				
A2010 Basement Excavation	\$0			
A2020 Basement Walls	\$0	<b>\$0</b>	\$0.00	0.0%
<b>B10 SUPERSTRUCTURE</b>				
B1010 Upper Floor Construction	\$17,143,803			
B1020 Roof Construction	\$9,192,600	<b>\$26,336,403</b>	\$59.74	9.5%
<b>B20 EXTERIOR CLOSURE</b>				
B2010 Exterior Walls	\$19,835,307			
B2020 Windows	\$8,930,842			
B2030 Exterior Doors	\$440,816	<b>\$29,206,965</b>	\$66.26	10.6%
<b>B30 ROOFING</b>				
B3010 Roof Coverings	\$7,581,795			
B3020 Roof Openings	\$54,000	<b>\$7,635,795</b>	\$17.32	2.8%
<b>C10 INTERIOR CONSTRUCTION</b>				
C1010 Partitions	\$19,786,516			
C1020 Interior Doors	\$5,399,528			
C1030 Specialties/Millwork	\$6,680,093	<b>\$31,866,137</b>	\$72.29	11.5%
<b>C20 STAIRCASES</b>				
C2010 Stair Construction	\$1,217,250			
C2020 Stair Finishes	\$360,000	<b>\$1,577,250</b>	\$3.58	0.6%
<b>C30 INTERIOR FINISHES</b>				
C3010 Wall Finishes	\$7,493,872			
C3020 Floor Finishes	\$6,612,240			
C3030 Ceiling Finishes	\$6,612,240	<b>\$20,718,352</b>	\$47.00	7.5%
<b>D10 CONVEYING SYSTEMS</b>				
D1010 Elevator	\$1,207,200	<b>\$1,207,200</b>	\$2.74	0.4%



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### CONSTRUCTION COST SUMMARY

BUILDING SYSTEM	SUB-TOTAL	TOTAL	\$/SF	%
<b>BUILDING SUMMARY - OPTION C.1.d</b>				
<b>D20 PLUMBING</b>				
D20 Plumbing	\$13,342,848	<b>\$13,342,848</b>	\$30.27	4.8%
<b>D30 HVAC</b>				
D30 HVAC	\$62,423,440	<b>\$62,423,440</b>	\$141.61	22.6%
<b>D40 FIRE PROTECTION</b>				
D40 Fire Protection	\$4,117,344	<b>\$4,117,344</b>	\$9.34	1.5%
<b>D50 ELECTRICAL</b>				
D5010 Complete System	\$50,862,500	<b>\$50,862,500</b>	\$115.38	18.4%
<b>E10 EQUIPMENT</b>				
E10 Equipment	\$5,111,385	<b>\$5,111,385</b>	\$11.60	1.9%
<b>E20 FURNISHINGS</b>				
E2010 Fixed Furnishings	\$5,700,252			
E2020 Movable Furnishings	NIC	<b>\$5,700,252</b>	\$12.93	2.1%
<b>F10 SPECIAL CONSTRUCTION</b>				
F10 Special Construction	\$150,000	<b>\$150,000</b>	\$0.34	0.1%
<b>F20 HAZMAT REMOVALS</b>				
F2010 Building Elements Demolition	\$0			
F2020 Hazardous Components Abatement	\$0	<b>\$0</b>	\$0.00	0.0%
<b>TOTAL DIRECT COST (Trade Costs)</b>		<b>\$276,065,091</b>	\$626.26	100.0%



PSR Options Cost Estimate

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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**BUILDING BACKUP - OPTION C.1.d**

**GROSS FLOOR AREA CALCULATION**

Level 1	169,550
Level 2	111,060
Level 3	90,000
Level 4	70,206

**TOTAL GROSS FLOOR AREA (GFA)**

**440,816 sf**

**A10 FOUNDATIONS**

**A1010 STANDARD FOUNDATIONS**

Strip Footings: 1 x 3

Formwork	5,750	sf	15.00	86,250
Re-bar	37,950	lbs.	2.50	94,875
Concrete material	335	cy	160.00	53,600
Placing concrete	335	cy	120.00	40,200

Perimeter foundation walls: 20" Thick x 3.5 ft H

Formwork	20,125	sf	21.00	422,625
Re-bar	50,313	lbs.	2.50	125,783
Concrete material	654	cy	160.00	104,640
Placing concrete	654	cy	120.00	78,480
Form shelf	2,875	lf	8.00	23,000

Spread Footings: 9 x 9 x 2 (Three Story)

Formwork	14,328	sf	18.00	257,904
Re-bar	96,714	lbs.	2.50	241,785
Concrete material	1,254	cy	160.00	200,640
Placing concrete	1,254	cy	120.00	150,480
Set anchor bolts grout plates	199	ea	250.00	49,750

Spread Footings: 10 x 10 x 2 (Four Story)

Formwork	18,000	sf	18.00	324,000
Re-bar	135,000	lbs.	2.50	337,500
Concrete material	1,750	cy	160.00	280,000
Placing concrete	1,750	cy	120.00	210,000
Set anchor bolts grout plates	225	ea	250.00	56,250

Piers

Formwork	5,088	sf	24.00	122,112
Re-bar	57,240	lbs	2.50	143,100
Concrete material	198	cy	160.00	31,680
Placing concrete	198	cy	160.00	31,680
Housekeeping pads	1	ls	30,000.00	30,000

070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Dampproofing @ foundation wall	11,500	sf	4.00	46,000
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072100 THERMAL INSULATION

Rigid insulation to face of foundation wall; 4" R-20	11,500	sf	5.00	57,500
Brick Shelf 4" insulation	2,875	lf	20.00	57,500

312000 EARTHWORK

Strip footings

Excavation	3,194	cy	14.00	44,716
Reuse excess material on site	989	cy	15.00	14,835
Backfill with select fill	2,205	cy	25.00	55,125

Spread footings

Excavation	8,367	cy	14.00	117,138
Reuse excess material on site	3,202	cy	15.00	48,030
Backfill with select fill	5,165	cy	25.00	129,125

Miscellaneous

Foundation drain	2,875	lf	30.00	86,250
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PSR Options Cost Estimate

GFA

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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>BUILDING BACKUP - OPTION C.1.d</b>							
	Temporary dewatering for foundation work	1	ls	250,000.00	250,000		
	SUBTOTAL					4,402,553	
<b>A1020</b>	<b>SPECIAL FOUNDATIONS</b>						
	Rigid inclusions	169,550	sf	35.00	5,934,250		
	SUBTOTAL					5,934,250	
<b>A1030</b>	<b>LOWEST FLOOR CONSTRUCTION</b>						
033000	CONCRETE						
	Vapor barrier, 15mils	169,550	sf	1.25	211,938		
	Slab on grade	169,550	sf				
	WWF reinforcement	194,983	sf	1.85	360,719		
	Concrete - 5" thick	2,703	cy	170.00	459,510		
	Placing concrete	2,703	cy	65.00	175,695		
	Finishing and curing concrete	169,550	sf	3.00	508,650		
	Control joints - saw cut	169,550	sf	0.10	16,955		
	Miscellaneous						
	Equipment pads	1	ls	30,000.00	30,000		
	Loading dock	1	ls	50,000.00	50,000		
	Elevator pits	3	ea	40,000.00	120,000		
	Radon system				Excluded; NR		
072100	THERMAL INSULATION						
	Perimeter insulation, 4" thick R-20 - 6ft at perimeter	17,250	sf	5.00	86,250		
	Under slab insulation, 2" thick under slab	152,300	sf	3.00	456,900		
312000	EARTHWORK						
	Gravel base, 12"	6,280	cy	45.00	282,600		
	Structural fill	37,000	cy	55.00	2,035,000		
	Allowance for underslab drainage	169,550	sf	2.00	339,100		
	Compact existing sub-grade	169,550	sf	0.50	84,775		
	Underslab E&B for plumbing	169,550	sf	1.50	254,325		
	SUBTOTAL					5,472,417	
<b>TOTAL - FOUNDATIONS</b>							<b>\$15,809,220</b>
<b>A20</b>	<b>BASEMENT CONSTRUCTION</b>						
<b>A2010</b>	<b>BASEMENT EXCAVATION</b>						
	No Work in this section						
	SUBTOTAL					-	
<b>A2020</b>	<b>BASEMENT WALLS</b>						
	No Work in this section						
	SUBTOTAL					-	
<b>TOTAL - BASEMENT CONSTRUCTION</b>							
<b>B10</b>	<b>SUPERSTRUCTURE</b>						
<b>B1010</b>	<b>FLOOR CONSTRUCTION</b>						
		14.6	lbs/sf				
		3,216	tns				
		\$6,550	\$/Ton				
							including canopies + roof screens
033000	CONCRETE						
	WWF reinforcement	311,956	sf	1.85	577,119		
	Concrete Fill to metal deck; lightweight, total thickness 6 1/4"	5,486	cy	190.00	1,042,340		
	Place and finish concrete	271,266	sf	3.00	813,798		
	Rebar to decks	81,380	lbs	2.00	162,760		
051200	STRUCTURAL STEEL FRAMING						
	Structural steel framing; Complete; 15 lbs per SF	2,034	tns	5,000.00	10,170,000		
	Steel premium for lateral system due to poor soils; 1 PSF	136	tns	5,000.00	680,000		
	Moment connections	102	ea	750.00	76,500		
	Shear studs	67,817	ea	3.50	237,360		
	3" metal galvanized floor deck	271,266	sf	8.00	2,170,128		



PSR Options Cost Estimate

GFA

440,816

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>BUILDING BACKUP - OPTION C.1.d</b>							
	Expansion joints	1	ls	100,000.00	100,000		
078100	<b>FIREPROOFING/FIRESTOPPING</b>						
	Fire proofing to columns and beams; 2 hr	271,266	sf	3.00	813,798		
	Intumescent paint @ architecturally exposed beams and columns - allow	1	ls	300,000.00	300,000		
	<b>SUBTOTAL</b>					17,143,803	
<b>B1020 ROOF CONSTRUCTION</b>							
033000	<b>CONCRETE</b>						
	6" Normal weight concrete deck at low roof and at mechanical equipment pads	35,000	sf	9.00	315,000		
051200	<b>STRUCTURAL STEEL FRAMING</b>						
	Structural steel framing; Complete; 13 lbs per SF	1,102	tns	5,000.00	5,510,000		
	Structural steel framing; 2 lbs per SF premium at RTU's	35	tns	4,800.00	168,000		
	Steel premium for lateral system due to poor soils; 1 PSF	85	tns	5,000.00	425,000		
	Roof screens	80	tns	5,500.00	440,000		
	<u>Decking</u>						
	1 1/2" galvanized metal deck, typical	169,550	sf	7.00	1,186,850		
078100	<b>FIREPROOFING/FIRESTOPPING</b>						
	Fireproofing to columns, beams and deck; 1 hr	169,550	sf	5.00	847,750		
	Intumescent paint @ architecturally exposed beams and columns - allow	1	ls	300,000.00	300,000		
	<b>SUBTOTAL</b>					9,192,600	
<b>TOTAL - SUPERSTRUCTURE</b>							<b>\$26,336,403</b>

<b>B20 EXTERIOR CLOSURE</b>
-----------------------------

<b>B2010 EXTERIOR WALLS</b>	164,183	Total closure area
<b>Exterior Wall Area</b>	123,137	sf total area solid
042000	<b>MASONRY</b>	
	Mockup	1 ls 100,000.00 100,000
	Brick veneer; 60% of Solid	73,882 sf 44.00 3,250,808
	Granite veneer base; 2%	2,463 sf 120.00 295,560
	Precast trim allowance	1 ls 1,200,000.00 1,200,000
	4" CMU wall at auditorium	9,000 sf 30.00 270,000
	8" Mineral wool at exterior closure (2 layers 4")	123,137 sf 7.50 923,528
	Miscellaneous flashings and sealants	123,137 sf 1.50 184,706
	Staging to exterior wall	123,137 sf 4.00 492,548
055000	<b>MISC. METALS</b>	
	Misc. metals at masonry including loose lintels (relieving angles included in steel tns)	73,882 sf 1.50 110,823
070001	<b>WATERPROOFING, DAMPPROOFING AND CAULKING</b>	
	Air barrier	123,137 sf 10.00 1,231,370
	Miscellaneous sealants to closure	123,137 sf 1.00 123,137
072100	<b>THERMAL INSULATION</b>	
	4" cellulose insulation in stud	123,137 sf 3.25 400,195
	Insulation at glazed openings	13,682 lf 6.00 82,092
076400	<b>CLADDING</b>	
	Composite metal panel, Alucobond or equal; 18%	22,165 sf 100.00 2,216,500
	Terracotta; 20%	24,627 sf 160.00 3,940,320
	Canopies; soffit + framing	4,000 sf 100.00 400,000



PSR Options Cost Estimate

GFA

440,816

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>BUILDING BACKUP - OPTION C.1.d</b>							
	12' high Acoustic Equipment Screen	16,000	sf	95.00	1,520,000		
	<i>EXPANSION JOINT COVERS</i>						
	Thermal breaks	1	ls	50,000.00	50,000		
	Expansion joints	1	ls	100,000.00	100,000		
092900	<i>GYP SUM BOARD ASSEMBLIES</i>						
	<i>Exterior wall;</i>						
	6" Stud backup	123,137	sf	16.00	1,970,192		
	Gypsum Sheathing	123,137	sf	3.50	430,980		
	Drywall lining to interior face of stud backup	123,137	sf	4.00	492,548		
101400	<i>SIGNAGE</i>						
	Exterior signage - allowance	1	ls	50,000.00	50,000		
	SUBTOTAL					19,835,307	
<b>B2020</b>	<b>WINDOWS</b>						
	<b>Exterior Wall Area</b>	41,046	sf				
061000	<i>ROUGH CARPENTRY</i>						
	Wood blocking at openings	13,682	lf	10.00	136,820		
070001	<i>WATERPROOFING, DAMPPROOFING AND CAULKING</i>						
	Air barrier/flashing at windows	13,682	lf	10.00	136,820		
	Backer rod & double sealant	13,682	lf	11.00	150,502		
080001	<i>METAL WINDOWS</i>						
	Aluminum windows, triple glazed including interior and exterior trim per details	20,523	sf	175.00	3,591,525		
	Curtainwall, triple glazed including allowance for interior and exterior trim details	20,523	sf	225.00	4,617,675		
	Horizontal aluminum fin sunshades @ 40% of windows, custom color	1,700	lf	175.00	297,500		
	Passive house premium					NR	
089000	<i>LOUVERS</i>						
	Louvers					N/A	
	SUBTOTAL					8,930,842	
<b>B2030</b>	<b>EXTERIOR DOORS</b>						
	Allowance for exterior doors	440,816	gsf	1.00	440,816		
	SUBTOTAL					440,816	
<b>TOTAL - EXTERIOR CLOSURE</b>							<b>\$29,206,965</b>

**B30 ROOFING**

055000	<i>MISCELLANEOUS METALS</i>						
	Terrace top rail/ladders/stairs	1	ls	80,000.00	80,000		
061000	<i>ROUGH CARPENTRY</i>						
	Rough carpentry and blocking @ roof	169,550	sf	1.50	254,325		
070002	<i>ROOFING AND FLASHING</i>	169,550	total area				
	PVC roof membrane system, white or gray, 1/2" coverboard, 10" polyiso insulation, vapor barrier	169,550	sf	33.00	5,595,150		
	Canopy roofing	4,000	sf	28.00	112,000		
	Plaza deck pavers system at terrace	12,316	sf	70.00	862,120		
	<u>Miscellaneous Roofing</u>						
	Miscellaneous flashings/copings/walkway pads etc.	169,550	sf	4.00	678,200		
	SUBTOTAL					7,581,795	

**B3020 ROOF OPENINGS**



PSR Options Cost Estimate

GFA

440,816

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**BUILDING BACKUP - OPTION C.1.d**

*086300 ROOF SKYLIGHTS*

Aluminum framed skylight (4loc)

None Assumed

Smoke vents; 7'x7'

3

ea

18,000.00

54,000

SUBTOTAL

54,000

**TOTAL - ROOFING**

**\$7,635,795**

**C10 INTERIOR CONSTRUCTION**

**C1010 PARTITIONS**

*040001 MASONRY*

Allowance for masonry partitions

440,816

gsf

6.00

2,644,896

*061000 ROUGH CARPENTRY*

Backer panels in electrical closets

1

ls

10,000.00

10,000

Wood blocking at interiors

440,816

gsf

0.50

220,408

*078400 FIREPROOFING/FIRESTOPPING*

Fire stopping including slab edges and core

440,816

gsf

1.00

440,816

*070001 WATERPROOFING, DAMPPROOFING AND CAULKING*

Miscellaneous sealants throughout building

440,816

gsf

1.25

551,020

*078150 EXPANSION JOINTS*

Allowance for expansion joint covers

1

ls

50,000.00

50,000

*081110 INTERIOR GLAZING*

Allowance for interior glazing

440,816

gsf

3.00

1,322,448

*092900 GYPSUM BOARD ASSEMBLIES*

Allowance for GWB partitions

440,816

gsf

33.00

14,546,928

SUBTOTAL

19,786,516

**C1020 INTERIOR DOORS**

Doors, frames, hardware; complete

440,816

gsf

8.00

3,526,528

Fire shutters

1

ls

150,000.00

150,000

Security doors

16

loc

25,000.00

400,000

Premium for electronic hardware

882

set

1,500.00

1,323,000

SUBTOTAL

5,399,528

**C1030 SPECIALTIES / MILLWORK**

*055000 MISCELLANEOUS METALS*

Miscellaneous metals throughout building

440,816

gsf

5.00

2,204,080

*061000 ROUGH CARPENTRY*

*062000 INTERIOR ARCHITECTURAL WOODWORK*

Interior millwork package

440,816

gsf

3.00

1,322,448

*101100 VISUAL DISPLAY SURFACES*

Markerboard and tackboard package

440,816

gsf

2.00

881,632

*101400 SIGNAGE*

Room identification, directional & safety signage, building directory  
+ environmental graphics

440,816

gsf

2.00

881,632

*102800 TOILET ACCESSORIES*

Toilet accessories/compartments

440,816

gsf

1.00

440,816

*104400 FIRE PROTECTION SPECIALTIES*

Fire extinguisher cabinets

1

ls

65,852.71

65,853

AED cabinets

1

ls

2,000.00

2,000

*105000 LOCKERS*



PSR Options Cost Estimate

GFA

440,816

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**BUILDING BACKUP - OPTION C.1.d**

Student lockers	440,816	gsf	2.00	881,632		
SUBTOTAL					6,680,093	

<b>TOTAL - INTERIOR CONSTRUCTION</b>	<b>\$31,866,137</b>
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**C20 STAIRCASES**

**C2010 STAIR CONSTRUCTION**

033000	CONCRETE						
	Concrete to stairs	18	flt	5,000.00	90,000		
055000	MISCELLANEOUS METALS						
	Egress stairs w/ stainless steel rails and handrails	15	flt	50,000.00	750,000		
	Projection room stair, 4' wide	1	flt	40,000.00	40,000		
	<u>Learning stair</u>						
	Stainless steel guardrail	65	lf	425.00	27,625		
	Stainless steel handrail	55	lf	175.00	9,625		
	Adjacent stairs; 5'-3" wide	2	flt	75,000.00	150,000		
	Learning stair framing						
	Framing at learning stair - premium	1	ls	150,000.00	150,000		
	SUBTOTAL					1,217,250	

**C2020 STAIR FINISHES**

090005	RESILIENT FLOORS						
	Stair finishes	18	flts	20,000.00	360,000		
	SUBTOTAL					360,000	

<b>TOTAL - STAIRCASES</b>	<b>\$1,577,250</b>
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**C30 INTERIOR FINISHES**

**C3010 WALL FINISHES**

Wall finishes complete package	440,816	gsf	17.00	7,493,872		
SUBTOTAL					7,493,872	

**C3020 FLOOR FINISHES**

Floor finishes complete package	440,816	gsf	15.00	6,612,240		
SUBTOTAL					6,612,240	

**C3030 CEILING FINISHES**

Ceiling finishes complete package	440,816	gsf	15.00	6,612,240		
SUBTOTAL					6,612,240	

<b>TOTAL - INTERIOR FINISHES</b>	<b>\$20,718,352</b>
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**D10 CONVEYING SYSTEMS**

**D1010 ELEVATOR**

055000	MISCELLANEOUS METALS						
	Pit ladder and miscellaneous metals	3	ea	900.00	2,700		
	Sill angles	3	ls	1,500.00	4,500		
142100	ELEVATOR						
	Electric traction elevator, 3 stop, 5,000lbs	3	ea	400,000.00	1,200,000		
	SUBTOTAL					1,207,200	

<b>TOTAL - CONVEYING SYSTEMS</b>	<b>\$1,207,200</b>
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**D20 PLUMBING**

**D20 PLUMBING, GENERALLY**

Air source heat pump water heater (2) 500MBH	1	ls	1,000,000.00	1,000,000		
Plumbing package complete	440,816	gsf	28.00	12,342,848		





PSR Options Cost Estimate

GFA

440,816

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**BUILDING BACKUP - OPTION C.1.d**

SUBTOTAL

13,342,848

<b>TOTAL - PLUMBING</b>	<b>\$13,342,848</b>
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**D30 HVAC**

**D30 HVAC, GENERALLY**

Geothermal Wells 800' well	350	wells	65,000.00	22,750,000	
HVAC System; Water Source Heat Pump	440,816	gsf	90.00	39,673,440	
SUBTOTAL					62,423,440

<b>TOTAL - HVAC</b>	<b>\$62,423,440</b>
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**D40 FIRE PROTECTION**

**D40 FIRE PROTECTION, GENERALLY**

Fire Equipment

Fire pump with controller 750GPM, incl Jockey pump with controller	1	ea	150,000.00	150,000	
Sprinkler system; complete	440,816	gsf	9.00	3,967,344	
SUBTOTAL					4,117,344

<b>TOTAL - FIRE PROTECTION</b>	<b>\$4,117,344</b>
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**D50 ELECTRICAL**

**D5010 ELECTRICAL SYSTEMS**

**Gear & Distribution**

Normal power distribution system					
4000A 277/480V main switchboard	2	ea	185,000.00	370,000	
Panelboards/feeders	440,816	gsf	8.00	3,526,528	
<u>Emergency power</u>					
Emergency Generator; 1250 kW Diesel	1	ls	812,500.00	812,500	
Emergency power feeders	440,816	gsf	3.00	1,322,448	
<u>Photovoltaic - 3500 kW</u>					
PV system equipment; roof top; low roof	33,808	sf	36.00	1,217,088	
PV system equipment; roof top; High roof (with Structure)	84,825	sf	60.00	5,089,500	
PV system equipment; canopy	102,250	sf	60.00	6,135,000	
Battery Storage	1	ls	2,500,000	2,500,000	
Transparent + opaque vertical cladding BIPV	3,758	sf	200.00	751,600	
<u>Equipment Wiring</u>					
Feeders + Electrical to equipment	440,816	gsf	10.00	4,408,160	
SUBTOTAL					26,132,824

**D5020 LIGHTING & POWER**

Lighting, Controls + Power	440,816	gsf	18.00	7,934,688	
SUBTOTAL					7,934,688

**D5030 COMMUNICATION & SECURITY SYSTEMS**

Telecommunications/PA + Clock	440,816	gsf	4.00	1,763,264	
<u>Performance lighting</u>					
Theater AV	1	ls	200,000.00	200,000	
Stage lighting fixture package	1	ls	250,000.00	250,000	
Audio Visual Systems	440,816	gsf	9.50	4,187,752	
Classroom speech + AV	225	rms	5,000.00	1,125,000	
<u>Specialty Communications Systems</u>					
BDA system, antenna and annunciator	440,816	sf	0.65	286,530	
Cell repeater/Distributed antenna system, not specified	440,816	sf	1.00	440,816	
Emergency 2 way communication system at elevator lobbies +stairs	1	ls	100,000.00	100,000	
<u>Fire Alarm</u>	440,816	gsf	4.00	1,763,264	
Security System	440,816	gsf	10.00	4,408,160	
SUBTOTAL					14,524,786

**D5040 OTHER ELECTRICAL SYSTEMS**



PSR Options Cost Estimate

GFA

440,816

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**BUILDING BACKUP - OPTION C.1.d**

Common Work Results for Electrical

Lightning prevention	440,816	gsf	0.30	132,245	
Grounding	440,816	gsf	0.40	176,326	
Misc. demolition work	440,816	gsf	0.25	110,204	
Temp power and lights	440,816	gsf	1.20	528,979	
Seismic restraints/Coordination/misc.	440,816	gsf	3.00	1,322,448	
SUBTOTAL					2,270,202

<b>TOTAL - ELECTRICAL</b>	<b>\$50,862,500</b>
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**E10 EQUIPMENT**

**E10 EQUIPMENT, GENERALLY**

**112000 LOADING DOCK EQUIPMENT**

Loading dock leveler(2), truck restraints (2) and bumpers	1	ls	50,000.00	50,000	
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**110620 THEATRICAL EQUIPMENT**

*Allowance per Architect*

Stage lighting and fixtures - equipment only	1	ls	358,000.00	358,000	
Stage rigging, installed	1	ls	275,000.00	275,000	
Stage curtains, installed	1	ls	88,385.00	88,385	
Forestage Platforms, installed	1	ls	100,000.00	100,000	
Orchestra Enclosure, installed	1	ls	175,000.00	175,000	
Orchestra Pit Lift	1	ls	150,000.00	150,000	
Auditorium AV Equipment				See Electrical	

**113100 APPLIANCES**

Residential appliances - allowance	1	ls	60,000.00	60,000	
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**114000 FOOD SERVICE EQUIPMENT**

Kitchen equipment	1	ls	2,500,000.00	2,500,000	
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**115300 EDUCATIONAL EQUIPMENT**

Science equipment;	1	ls	400,000.00	400,000	
Kiln	1	ea	5,000.00	5,000	
Allowance for miscellaneous equipment	1	ls	50,000	50,000	

**116600 GYM EQUIPMENT**

Gym Equipment	1	ls	500,000.00	500,000	
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**126000 SEATING**

Auditorium seating	1,000	seat	400.00	400,000	
SUBTOTAL					5,111,385

<b>TOTAL - EQUIPMENT</b>	<b>\$5,111,385</b>
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**E20 FURNISHINGS**

**E2010 FIXED FURNISHINGS**

**122100 WINDOW TREATMENT**

Window shades at exterior glazing including blackout shades at art & science classrooms - allowance	41,046	sf	10.00	410,460	
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**123553 CASEWORK**

Casework package	440,816	gsf	12.00	5,289,792	
SUBTOTAL					5,700,252

**E2020 MOVABLE FURNISHINGS**

All movable furnishings to be provided and installed by owner

SUBTOTAL					NIC
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<b>TOTAL - FURNISHINGS</b>	<b>\$5,700,252</b>
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**F10 SPECIAL CONSTRUCTION**

**F10 SPECIAL CONSTRUCTION**



PSR Options Cost Estimate

GFA

440,816

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**BUILDING BACKUP - OPTION C.1.d**

Pre-engineered Greenhouse

1

ls

150,000.00

150,000

SUBTOTAL

150,000

**TOTAL - SPECIAL CONSTRUCTION**

**\$150,000**

**F20 SELECTIVE BUILDING DEMOLITION**

**F2010 BUILDING ELEMENTS DEMOLITION**

No items in this section

SUBTOTAL

**F2020 HAZARDOUS COMPONENTS ABATEMENT**

See main summary for HazMat allowance

See Summary

SUBTOTAL

**TOTAL - SELECTIVE BUILDING DEMOLITION**

**SUBTOTAL**

**\$276,065,091**



Lexington High School  
Town of Lexington, MA

07-Oct-24

PSR Options Cost Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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SITEWORK C.1.d

<b>G SITEWORK</b>							
<b>G10</b>	<b>SITE PREPARATION &amp; DEMOLITION</b>	<b>2,015,000</b>	<b>sf</b>				
<b>311000</b>	<b>GENERAL CONDITIONS</b>						
	Mobilizations/Temp Parking/Etc.	<b>1</b>	ls	500,000.00	500,000		
	6' high site construction fence - perimeter	<b>7,500</b>	lf	18.00	135,000		
<b>311000</b>	<b>SITE DEMOLITION AND RELOCATIONS</b>						
	Demolish existing site conditions	<b>1</b>	ls	900,000.00	900,000		
<b>311000</b>	<b>UTILITY DEMOLITION</b>						
	Demolish existing utility lines	<b>1</b>	ls	250,000.00	250,000		
	Utility Support/Ground Improvements	<b>1</b>	ls	1,000,000.00	1,000,000		
<b>311000</b>	<b>VEGETATION &amp; TOPSOIL MANAGEMENT</b>						
	Strip + dispose topsoil (swell 25%)	<b>23,264</b>	cy	37.00	860,768		
	Street sweeping allowance during hauling	<b>1</b>	ls	50,000.00	50,000		
<b>311000</b>	<b>CLEAR GRASSY KNOLL</b>						
	Remove trees/vegetation	<b>1</b>	ls	10,000.00	10,000		
	Strip + dispose topsoil	<b>1,600</b>	cy	37.00	59,200		
	Rock removal; mechanical	<b>1,600</b>	cy	85.00	136,000		
<b>312000</b>	<b>EROSION &amp; SEDIMENT CONTROL</b>						
	Silt Fence; installation and removal	<b>7,500</b>	lf	12.00	90,000		
	Erosion Control monitoring & maintenance	<b>1</b>	ls	80,000.00	80,000		
<b>312000</b>	<b>SITE EARTHWORK</b>						
	<u>Site cut to design subgrade</u>	<b>0</b>	cy				
	Cut	<b>0</b>	cy	20.00			
	Store cut onsite					NR	
	Process cut and amend with additional soils for reuse					NR	
	Imported fill	<b>64,000</b>	cy	40.00	2,560,000		
<b>312000</b>	<b>SOIL DISPOSAL - conversion factor 1.7 to tons</b>						
	Load excess soils for disposal						
	Less than RCS-1 - clean non-regulated	<b>1</b>	ls			NR	
	General rock removal	<b>3,400</b>	cy	85.00	289,000		
<b>312000</b>	<b>ESTABLISHING GRADE</b>						
	Sub grade establishment	<b>2,015,000</b>	sf	0.15	302,250		
	Fine grading throughout the site	<b>2,015,000</b>	sf	0.25	503,750		
<b>312000</b>	<b>HAZARDOUS MATERIALS</b>						
	UST removal allowance					NR	
	Soil disposal & replacement allowance					See Summary	
	SUBTOTAL						7,725,968
<b>G20</b>	<b>SITE IMPROVEMENTS</b>						
	<b>Roadways and Parking Lots</b>						
	<u>Bituminous concrete pavement - standard</u>	<b>286,400</b>	<b>sf</b>				
	gravel base; 8" thick	<b>22,143</b>	cy	50.00	1,107,150		
	asphalt top; 1.5" thick	<b>2,738</b>	tns	200.00	547,600		
	asphalt binder; 2" thick	<b>3,658</b>	tns	190.00	695,020		
	<u>Porous Pavement</u>	<b>71,600</b>	<b>sf</b>				
	Choker course; 4" thick crushed stone	<b>1,127</b>	cy	75.00	84,525		
	Filter course; 8" thick gravel	<b>2,221</b>	cy	65.00	144,365		
	Reservoir course; 8" thick crushed stone	<b>2,221</b>	cy	55.00	122,155		
	Porous pavement; 4" thick	<b>1,807</b>	tns	400.00	722,800		
	Geotextiles to paving	<b>358,000</b>	sf	1.50	537,000		
<b>320000</b>	<b>CURBING</b>						



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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>SITEWORK C.1.d</b>							
320000	Vertical granite curb	19,000	lf	55.00	1,045,000		
	ROAD MARKINGS AND SIGNS						
	Parking spot	500	ea	85.00	42,500		
	Parking spot ADA premium	45	ea	250.00	11,250		
	Pavement markings/signage allowance	1	ls	100,000.00	100,000		
	SUBTOTAL					5,159,365	
<b>320000 PEDESTRIAN PAVING</b>							
	Concrete sidewalks	115,000	sf				
	gravel base; 12" thick	5,324	cy	50.00	266,200		
	Broom finish concrete paving; 5" thick	115,000	sf	16.00	1,840,000		
	Concrete pads	1,500	sf				
	gravel base; 12" thick	104	cy	50.00	5,200		
	Broom finish concrete paving; 8" thick	1,500	sf	24.00	36,000		
	Porous concrete pavers; 20% of Plaza	14,000	sf				
	Open graded stone subbase AASHTO #2; 32" thick	1,731	cy	50.00	86,550		
	Open graded base AASHTO #57; 6" thick	324	cy	50.00	16,200		
	Open graded bedding course AASHTO #8; 2" thick	108	cy	65.00	7,020		
	Pavers	14,000	sf	28.00	392,000		
	Geotextiles on top, bottom and sides of subbase	3,111	sy	3.00	9,333		
	Concrete paving; 80% of Plaza	56,000	sf				
	gravel base; 12" thick	2,593	cy	50.00	129,650		
	Broom finish concrete paving; 5" thick	56,000	sf	18.00	1,008,000		
320000	STAIRS AND RAMPS						
	Ramp/stairs premium	1	ls	250,000.00	250,000		
	SUBTOTAL					4,046,153	
<b>320000 SITE IMPROVEMENTS</b>							
<b>320000 SITE FURNISHINGS</b>							
	Bollards/bike racks/benches/flag poles etc.	1	ls	1,000,000.00	1,000,000		
	New restroom/tickets/concessions building	1,000	sf	700.00	700,000		
320000	EXISTING STADIUM + TRACK ETR					No Costs Assumed	
	Grass fields; sod	360,000	sf				
	Varsity Baseball Diamond; C1	100,000	sf	6.00	600,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	60,000.00	60,000		
	Varsity Softball Diamond; C2	55,000	sf	6.00	330,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	30,000.00	30,000		
	Junior Varsity Baseball Diamond; C3 + Cricket	60,000	sf	6.00	360,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	50,000.00	50,000		
	Little League Diamond; C4	40,000	sf	6.00	240,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	30,000.00	30,000		
	Crumb football field; C5	60,000	sf	6.00	360,000		
	Worthen practice field; C6	45,000	sf	6.00	270,000		
	Tennis courts + Basketball courts					ETR	
<b>320000 ATHLETIC EQUIPMENT</b>							
	Equipment allowance	1	ls	180,000.00	180,000		



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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>SITework C.1.d</b>							
320000	<b>BLEACHERS AND SCOREBOARDS</b>						
	Bleachers + pressbox	1,000	seat	900.00	900,000		
	Electronic scoreboard; wireless controls, multiboard	1	ea	75,000.00	75,000		
	Electronic scoreboard; softball	1	ea	45,000.00	45,000		
320000	<b>FENCING</b>						
	Fencing allowance	1	ls	500,000.00	500,000		
	SUBTOTAL					6,090,000	
320000	<b>SITE WALLS</b>						
	Retaining walls/site walls/seat walls	1	ls	750,000.00	750,000		
	SUBTOTAL					750,000	
	<b>Landscaping</b>						
329900	<b>LAWN AND SEED</b>						
	Topsoil - imported 6" thick; swell 25%	15,741	cy	65.00	1,023,165		
	General Seeding	850,000	sf	0.50	425,000		
	Trees, Shrubs and Perennial planting area	1	ls	1,500,000.00	1,500,000		
	Courtyard	1	ls	150,000.00	150,000		
	<b>IRRIGATION</b>						
	Irrigation area	360,000	sf	1.50	540,000		
	Wetlands reconstruction	4,714	sf	20.00	NR		
	SUBTOTAL					3,638,165	
<b>G30</b>	<b>CIVIL MECHANICAL UTILITIES</b>						
210000	<b>FIRE PROTECTION</b>						
	12" CLDI	4,000	lf	150.00	600,000		
	8" CLDI	200	lf	100.00	20,000		
	6" CLDI	100	lf	95.00	9,500		
	Fire department connection	1	ea	2,500.00	2,500		
	Gate valve; hydrants	1	ls	60,000.00	60,000		
331000	<b>CONNECTIONS</b>						
	Connect to existing water line; 12" live tap	2	ea	15,000.00	30,000		
312000	<b>EXCAVATION &amp; BACKFILL</b>						
	DI piping excavation/backfill (inside site)	4,300	lf	50.00	215,000		
	Pressure test & chlorinate	4,300	lf	7.50	32,250		
	Allowance for temporary water service	1	ea	25,000.00	25,000		
	Allowance for temporary support of existing utilities				NR		
	SUBTOTAL					994,250	
333000	<b>SANITARY SEWER</b>						
	PVC sewer pipe	2,337	lf	60.00	140,220		
	Sewer manholes	7	ea	6,000.00	42,000		
	Connection to existing	2	loc	15,000.00	30,000		
	Grease trap - 6,000 gal.	2	ea	35,000.00	70,000		
	SUBTOTAL					282,220	
334000	<b>STORM DRAINAGE</b>						
	Infiltration systems	11,500	sf	45.00	517,500		
	Hydrodynamic separators	6	ea	20,000.00	120,000		
	Storm systems; complete at parking; piping; CB + MH etc.	286,400	sf	10.00	2,864,000		
	<u>Sodded Athletic fields</u>						
	Drainage at field	360,000	sf	1.00	Included with Fields		
	SUBTOTAL					3,501,500	
<b>G40</b>	<b>ELECTRICAL UTILITIES</b>						
	Concrete:						
	Primary duct bank 6-5" duct bank	900	lf	50.00	45,000		
	Secondary service 4000A - two services	200	lf	50.00	10,000		
	Generator duct bank	100	lf	40.00	4,000		
	PV 5000A secondary service (10) - 4"C	100	lf	60.00	6,000		



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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>SITEWORK C.1.d</b>							
	Communications duct bank 6-4"	750	lf	40.00	30,000		
	Transformer/generator pad	6	ea	3,000.00	18,000		
	Site lighting pole bases	56	ea	500.00	28,000		
	Excavation and backfill:						
	Primary duct bank 2-5" duct bank	900	lf	25.00	22,500		
	Secondary service 4000A	200	lf	30.00	6,000		
	Storage building 400A service	40	lf	22.00	880		
	Generator duct bank	100	lf	30.00	3,000		
	PV 5000A secondary service (10) - 4"C	100	lf	45.00	4,500		
	EV conduits				See Below		
	Communications duct bank 4-4"	750	lf	25.00	18,750		
	Site lighting circuitry	5,200	lf	6.00	31,200		
	2-2" PVC to sports field lighting	1,200	lf	10.00	12,000		
	CCTV circuitry	1,200	lf	6.00	7,200		
	Scoreboard power & data, misc. sports field power, allow	1,000	lf	6.00	6,000		
	SUBTOTAL					253,030	
	<u>Power</u>						
	<b>Site electrical 15 kVOLT- Transformers etc.</b>	1	ls	2,500,000.00	By Owner		
	Utility co. back charges				Included above		
	Primary duct bank	900	lf	180.00	162,000		
	Electric manhole	6	ea	12,500.00	75,000		
	Transformers + 15kVolt switchgear by Owner				Included above		
	Secondary service 4000A	200	lf	1,400.00	280,000		
	Generator:						
	Generator service	100	lf	400.00	40,000		
	PV:						
	PV 5000A secondary service (10) - 4"C	400	lf	600.00	240,000		
	<u>Communications</u>						
	Connect to existing utility pole	1	ea	1,500.00	1,500		
	Communications duct bank	750	lf	150.00	112,500		
	Communication manhole	2	ea	12,500.00	25,000		
	<u>Site Lighting</u>						
	Allowance	360,000	sf	2.00	720,000		
	<u>EV Stations</u>						
	EV stations; single	20	loc	15,000.00	300,000		
	EV stations; EV ready; conduit only	75	loc	4,000.00	300,000		
	EV stations; EV ready; conduit + wiring	50	loc	7,000.00	350,000		
	<u>Sports Fields</u>						
	Sports field lighting, allow 1 baseball field; 1 softball field + rectangle field	2	loc	460,000.00	920,000		
	Fixture MUSCO				Included above		
	Sports field lighting circuitry	1,200	lf	12.00	Included above		
	Scoreboard power & data, misc. sports field power, allow	1	ls	10,000.00	Included above		
	Rough-in, allow	1	ls	35,000.00	Included above		
	<u>Site Demolition</u>						
	Site demolition work				Included w/ building		
	SUBTOTAL					3,526,000	
<b>TOTAL - SITE DEVELOPMENT</b>							<b>\$35,966,651</b>



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GFA 440,816

## CONSTRUCTION COST SUMMARY

BUILDING SYSTEM		SUB-TOTAL	TOTAL	\$/SF	%
<b>BUILDING SUMMARY - OPTION C.2.b</b>					
<b>A10 FOUNDATIONS</b>					
A1010	Standard Foundations	\$4,315,805			
A1020	Special Foundations	\$5,892,775			
A1030	Lowest Floor Construction	\$5,448,297	<b>\$15,656,877</b>	\$35.52	5.8%
<b>A20 BASEMENT CONSTRUCTION</b>					
A2010	Basement Excavation	\$0			
A2020	Basement Walls	\$0	<b>\$0</b>	\$0.00	0.0%
<b>B10 SUPERSTRUCTURE</b>					
B1010	Upper Floor Construction	\$17,214,220			
B1020	Roof Construction	\$9,140,380	<b>\$26,354,600</b>	\$59.79	9.7%
<b>B20 EXTERIOR CLOSURE</b>					
B2010	Exterior Walls	\$16,897,636			
B2020	Windows	\$7,360,052			
B2030	Exterior Doors	\$440,816	<b>\$24,698,504</b>	\$56.03	9.1%
<b>B30 ROOFING</b>					
B3010	Roof Coverings	\$9,629,383			
B3020	Roof Openings	\$54,000	<b>\$9,683,383</b>	\$21.97	3.6%
<b>C10 INTERIOR CONSTRUCTION</b>					
C1010	Partitions	\$19,786,516			
C1020	Interior Doors	\$5,399,528			
C1030	Specialties/Millwork	\$6,680,093	<b>\$31,866,137</b>	\$72.29	11.7%
<b>C20 STAIRCASES</b>					
C2010	Stair Construction	\$1,327,250			
C2020	Stair Finishes	\$400,000	<b>\$1,727,250</b>	\$3.92	0.6%
<b>C30 INTERIOR FINISHES</b>					
C3010	Wall Finishes	\$7,493,872			
C3020	Floor Finishes	\$6,612,240			
C3030	Ceiling Finishes	\$6,612,240	<b>\$20,718,352</b>	\$47.00	7.6%
<b>D10 CONVEYING SYSTEMS</b>					
D1010	Elevator	\$1,205,700	<b>\$1,205,700</b>	\$2.74	0.4%





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## CONSTRUCTION COST SUMMARY

BUILDING SYSTEM		SUB-TOTAL	TOTAL	\$/SF	%
<b>BUILDING SUMMARY - OPTION C.2.b</b>					
<b>D20 PLUMBING</b>					
D20	Plumbing	\$13,342,848	<b>\$13,342,848</b>	\$30.27	4.9%
<b>D30 HVAC</b>					
D30	HVAC	\$62,423,440	<b>\$62,423,440</b>	\$141.61	23.0%
<b>D40 FIRE PROTECTION</b>					
D40	Fire Protection	\$4,117,344	<b>\$4,117,344</b>	\$9.34	1.5%
<b>D50 ELECTRICAL</b>					
D5010	Complete System	\$50,957,100	<b>\$50,957,100</b>	\$115.60	18.8%
<b>E10 EQUIPMENT</b>					
E10	Equipment	\$2,861,385	<b>\$2,861,385</b>	\$6.49	1.1%
<b>E20 FURNISHINGS</b>					
E2010	Fixed Furnishings	\$5,625,562			
E2020	Movable Furnishings	NIC	<b>\$5,625,562</b>	\$12.76	2.1%
<b>F10 SPECIAL CONSTRUCTION</b>					
F10	Special Construction	\$150,000	<b>\$150,000</b>	\$0.34	0.1%
<b>F20 HAZMAT REMOVALS</b>					
F2010	Building Elements Demolition	\$0			
F2020	Hazardous Components Abatement	See Summary	<b>\$0</b>	\$0.00	0.0%
<b>TOTAL DIRECT COST (Trade Costs)</b>			<b>\$271,388,482</b>	<b>\$615.65</b>	<b>100.0%</b>



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GFA

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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**BUILDING BACKUP - OPTION C.2.b**

**GROSS FLOOR AREA CALCULATION**

Level 1	168,365
Level 2	120,000
Level 3	90,000
Level 4	62,451

**TOTAL GROSS FLOOR AREA (GFA)**

**440,816 sf**

**A10 FOUNDATIONS**

**A1010 STANDARD FOUNDATIONS**

Strip Footings: 1 x 3

Formwork	5,466	sf	15.00	81,990
Re-bar	36,076	lbs.	2.50	90,190
Concrete material	319	cy	160.00	51,040
Placing concrete	319	cy	120.00	38,280

Perimeter foundation walls: 20" Thick x 3.5 ft H

Formwork	19,131	sf	21.00	401,751
Re-bar	47,828	lbs.	2.50	119,570
Concrete material	621	cy	160.00	99,360
Placing concrete	621	cy	120.00	74,520
Form shelf	2,733	lf	8.00	21,864

Spread Footings: 9 x 9 x 2 (Three Story)

Formwork	14,112	sf	18.00	254,016
Re-bar	95,256	lbs.	2.50	238,140
Concrete material	1,235	cy	160.00	197,600
Placing concrete	1,235	cy	120.00	148,200
Set anchor bolts grout plates	196	ea	250.00	49,000

Spread Footings: 10 x 10 x 2 (Four Story)

Formwork	18,000	sf	18.00	324,000
Re-bar	135,000	lbs.	2.50	337,500
Concrete material	1,750	cy	160.00	280,000
Placing concrete	1,750	cy	120.00	210,000
Set anchor bolts grout plates	225	ea	250.00	56,250

Piers

Formwork	5,052	sf	24.00	121,248
Re-bar	56,835	lbs.	2.50	142,088
Concrete material	196	cy	160.00	31,360
Placing concrete	196	cy	160.00	31,360
Housekeeping pads	1	ls	30,000.00	30,000

070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Dampproofing @ foundation wall	10,932	sf	4.00	43,728
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072100 THERMAL INSULATION

Rigid insulation to face of foundation wall; 4" R-20	10,932	sf	5.00	54,660
Brick Shelf 4" insulation	2,733	lf	20.00	54,660

312000 EARTHWORK

Strip footings

Excavation	3,037	cy	14.00	42,518
Reuse excess material on site	940	cy	15.00	14,100
Backfill with select fill	2,097	cy	25.00	52,425

Spread footings

Excavation	8,313	cy	14.00	116,382
Reuse excess material on site	3,181	cy	15.00	47,715
Backfill with select fill	5,132	cy	25.00	128,300

Miscellaneous

Foundation drain	2,733	lf	30.00	81,990
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**BUILDING BACKUP - OPTION C.2.b**

Temporary dewatering for foundation work  
SUBTOTAL

1 ls 250,000.00 250,000  
4,315,805

**A1020 SPECIAL FOUNDATIONS**

Rigid inclusions  
SUBTOTAL

168,365 sf 35.00 5,892,775  
5,892,775

**A1030 LOWEST FLOOR CONSTRUCTION**

**033000 CONCRETE**

Vapor barrier, 15mils  
Slab on grade  
WWF reinforcement  
Concrete - 5" thick  
Placing concrete  
Finishing and curing concrete  
Control joints - saw cut  
Miscellaneous

168,365 sf 1.25 210,456  
168,365 sf  
193,620 sf 1.85 358,197  
2,684 cy 170.00 456,280  
2,684 cy 65.00 174,460  
168,365 sf 3.00 505,095  
168,365 sf 0.10 16,837

Equipment pads

1 ls 30,000.00 30,000

Loading dock

1 ls 50,000.00 50,000

Elevator pits

3 ea 40,000.00 120,000

Radon system

Excluded; NR

**072100 THERMAL INSULATION**

Perimeter insulation, 4" thick R-20 - 6ft at perimeter  
Under slab insulation, 2" thick under slab

16,398 sf 5.00 81,990  
151,967 sf 3.00 455,901

**312000 EARTHWORK**

Gravel base, 12"  
Structural fill  
Allowance for underslab drainage  
Compact existing sub-grade  
Underslab E&B for plumbing  
SUBTOTAL

6,236 cy 45.00 280,620  
37,000 cy 55.00 2,035,000  
168,365 sf 2.00 336,730  
168,365 sf 0.50 84,183  
168,365 sf 1.50 252,548

5,448,297

**TOTAL - FOUNDATIONS**

**\$15,656,877**

**A20 BASEMENT CONSTRUCTION**

**A2010 BASEMENT EXCAVATION**

No Work in this section  
SUBTOTAL

-

**A2020 BASEMENT WALLS**

No Work in this section  
SUBTOTAL

-

**TOTAL - BASEMENT CONSTRUCTION**

**B10 SUPERSTRUCTURE**

**B1010 FLOOR CONSTRUCTION**

14.6 lbs/sf  
3,217 tns including canopies + roof screens  
\$6,551 \$/Ton

**033000 CONCRETE**

WWF reinforcement  
Concrete Fill to metal deck; lightweight, total thickness 6 1/4"  
Place and finish concrete  
Rebar to decks

313,319 sf 1.85 579,640  
5,510 cy 190.00 1,046,900  
272,451 sf 3.00 817,353  
81,735 lbs 2.00 163,470

**051200 STRUCTURAL STEEL FRAMING**

Structural steel framing; Complete; 15 lbs per SF  
Steel premium for lateral system due to poor soils; 1 PSF  
Moment connections  
Shear studs  
3" metal galvanized floor deck

2,043 tns 5,000.00 10,215,000  
136 tns 5,000.00 680,000  
102 ea 750.00 76,500  
68,113 ea 3.50 238,396  
272,451 sf 8.00 2,179,608



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**BUILDING BACKUP - OPTION C.2.b**

	Expansion joints	1	ls	100,000.00	100,000		
078100	<b>FIREPROOFING/FIRESTOPPING</b>						
	Fire proofing to columns and beams; 2 hr	272,451	sf	3.00	817,353		
	Intumescent paint @ architecturally exposed beams and columns - allow	1	ls	300,000.00	300,000		
	<b>SUBTOTAL</b>					17,214,220	

**B1020 ROOF CONSTRUCTION**

033000	<b>CONCRETE</b>						
	6" Normal weight concrete deck at low roof and at mechanical equipment pads	35,000	sf	9.00	315,000		
051200	<b>STRUCTURAL STEEL FRAMING</b>						
	Structural steel framing; Complete; 13 lbs per SF	1,094	tns	5,000.00	5,470,000		
	Structural steel framing; 2 lbs per SF premium at RTU's	35	tns	5,000.00	175,000		
	Steel premium for lateral system due to poor soils; 1 PSF	84	tns	5,000.00	420,000		
	Roof screens	80	tns	5,500.00	440,000		
	<u>Decking</u>						
	1 1/2" galvanized metal deck, typical	168,365	sf	7.00	1,178,555		
078100	<b>FIREPROOFING/FIRESTOPPING</b>						
	Fireproofing to columns, beams and deck; 1 hr - includes Intumescent	168,365	sf	5.00	841,825		
	Intumescent paint @ architecturally exposed beams and columns - allow	1	ls	300,000.00	300,000		
	<b>SUBTOTAL</b>					9,140,380	

<b>TOTAL - SUPERSTRUCTURE</b>						<b>\$26,354,600</b>	
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**B20 EXTERIOR CLOSURE**

**B2010 EXTERIOR WALLS**  
**Exterior Wall Area**

134,309 Total closure area  
100,732 sf total area solid

042000	<b>MASONRY</b>						
	Mockup	1	ls	100,000.00	100,000		
	Brick veneer; 60% of Solid	60,439	sf	44.00	2,659,316		
	Granite veneer base; 2%	2,015	sf	120.00	241,800		
	Precast trim allowance	1	ls	1,200,000.00	1,200,000		
	4" CMU wall at auditorium	9,000	sf	30.00	270,000		
	8" Mineral wool at exterior closure (2 layers 4")	100,732	sf	7.50	755,490		
	Miscellaneous flashings and sealants	100,732	sf	1.50	151,098		
	Staging to exterior wall	100,732	sf	4.00	402,928		
055000	<b>MISC. METALS</b>						
	Misc. metals at masonry including loose lintels (relieving angles included in steel tns)	60,439	sf	1.50	90,659		
070001	<b>WATERPROOFING, DAMPPROOFING AND CAULKING</b>						
	Air barrier	100,732	sf	10.00	1,007,320		
	Miscellaneous sealants to closure	100,732	sf	1.00	100,732		
072100	<b>THERMAL INSULATION</b>						
	4" cellulose insulation in stud	100,732	sf	3.25	327,379		
	Insulation at glazed openings	11,192	lf	6.00	67,152		
076400	<b>CLADDING</b>						
	Composite metal panel, Alucobond or equal; 18%	18,132	sf	100.00	1,813,200		
	Terracotta; 20%	20,146	sf	160.00	3,223,360		
	Canopies; soffit + framing	4,000	sf	100.00	400,000		
	12' high Acoustic Equipment Screen	16,000	sf	95.00	1,520,000		

**EXPANSION JOINT COVERS**



PSR Options Cost Estimate

GFA

440,816

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>BUILDING BACKUP - OPTION C.2.b</b>							
	Thermal breaks	1	ls	50,000.00	50,000		
	Expansion joints	1	ls	100,000.00	100,000		
092900	GYPSUM BOARD ASSEMBLIES						
	Exterior wall;						
	6" Stud backup	100,732	sf	16.00	1,611,712		
	Gypsum Sheathing	100,732	sf	3.50	352,562		
	Drywall lining to interior face of stud backup	100,732	sf	4.00	402,928		
101400	SIGNAGE						
	Exterior signage - allowance	1	ls	50,000.00	50,000		
	SUBTOTAL					16,897,636	
<b>B2020</b>	<b>WINDOWS</b>						
	Exterior Wall Area	33,577	sf				
061000	ROUGH CARPENTRY						
	Wood blocking at openings	11,192	lf	10.00	111,920		
070001	WATERPROOFING, DAMPPROOFING AND CAULKING						
	Air barrier/flashing at windows	11,192	lf	10.00	111,920		
	Backer rod & double sealant	11,192	lf	11.00	123,112		
080001	METAL WINDOWS						
	Aluminum windows, triple glazed including interior and exterior trim per details	16,789	sf	175.00	2,938,075		
	Curtainwall, triple glazed including allowance for interior and exterior trim details	16,789	sf	225.00	3,777,525		
	Horizontal aluminum fin sunshades @ 40% of windows, custom color	1,700	lf	175.00	297,500		
	Passive house premium					NR	
089000	LOUVERS						
	Louvers					N/A	
	SUBTOTAL					7,360,052	
<b>B2030</b>	<b>EXTERIOR DOORS</b>						
	Allowance for exterior doors	440,816	gsf	1.00	440,816		
	SUBTOTAL					440,816	
<b>TOTAL - EXTERIOR CLOSURE</b>							<b>\$24,698,504</b>

**B30 ROOFING**

055000	MISCELLANEOUS METALS						
	Terrace top rail/ladders/stairs	1	ls	80,000.00	80,000		
061000	ROUGH CARPENTRY						
	Rough carpentry and blocking @ roof	168,365	sf	1.50	252,548		
070002	ROOFING AND FLASHING	168,365	total area				
	PVC roof membrane system, white or gray, 1/2" coverboard, 10" polyiso insulation, vapor barrier	168,365	sf	33.00	5,556,045		
	Canopy roofing	4,000	sf	28.00	112,000		
	Plaza deck pavers system at terrace	42,219	sf	70.00	2,955,330		
	Miscellaneous Roofing						
	Miscellaneous flashings/copings/walkway pads etc.	168,365	sf	4.00	673,460		
	SUBTOTAL					9,629,383	
<b>B3020</b>	<b>ROOF OPENINGS</b>						
086300	ROOF SKYLIGHTS						
	Aluminum framed skylight (4loc)				None Assumed		
	Smoke vents; 7'x7'	3	ea	18,000.00	54,000		



Lexington High School  
Town of Lexington, MA

07-Oct-24

PSR Options Cost Estimate

GFA

440,816

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**BUILDING BACKUP - OPTION C.2.b**

SUBTOTAL

54,000

<b>TOTAL - ROOFING</b>	<b>\$9,683,383</b>
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**C10 INTERIOR CONSTRUCTION**

**C1010 PARTITIONS**

**040001 MASONRY**

Allowance for masonry partitions

440,816

gsf

6.00

2,644,896

**061000 ROUGH CARPENTRY**

Backer panels in electrical closets

1

ls

10,000.00

10,000

Wood blocking at interiors

440,816

gsf

0.50

220,408

**078400 FIREPROOFING/FIRESTOPPING**

Fire stopping including slab edges and core

440,816

gsf

1.00

440,816

**070001 WATERPROOFING, DAMPPROOFING AND CAULKING**

Miscellaneous sealants throughout building

440,816

gsf

1.25

551,020

**078150 EXPANSION JOINTS**

Allowance for expansion joint covers

1

ls

50,000.00

50,000

**081110 INTERIOR GLAZING**

Allowance for interior glazing

440,816

gsf

3.00

1,322,448

**092900 GYPSUM BOARD ASSEMBLIES**

Allowance for GWB partitions

440,816

gsf

33.00

14,546,928

SUBTOTAL

19,786,516

**C1020 INTERIOR DOORS**

Doors, frames, hardware; complete

440,816

gsf

8.00

3,526,528

Fire shutters

1

ls

150,000.00

150,000

Security doors

16

loc

25,000.00

400,000

Premium for electronic hardware

882

set

1,500.00

1,323,000

SUBTOTAL

5,399,528

**C1030 SPECIALTIES / MILLWORK**

**055000 MISCELLANEOUS METALS**

Miscellaneous metals throughout building

440,816

gsf

5.00

2,204,080

**061000 ROUGH CARPENTRY**

**062000 INTERIOR ARCHITECTURAL WOODWORK**

Interior millwork package

440,816

gsf

3.00

1,322,448

**101100 VISUAL DISPLAY SURFACES**

Markerboard and tackboard package

440,816

gsf

2.00

881,632

**101400 SIGNAGE**

Room identification, directional & safety signage, building directory  
+ environmental graphics

440,816

gsf

2.00

881,632

**102800 TOILET ACCESSORIES**

Toilet accessories/compartments

440,816

gsf

1.00

440,816

**104400 FIRE PROTECTION SPECIALTIES**

Fire extinguisher cabinets

1

ls

65,852.71

65,853

AED cabinets

1

ls

2,000.00

2,000

**105000 LOCKERS**

Student lockers

440,816

gsf

2.00

881,632

SUBTOTAL

6,680,093

<b>TOTAL - INTERIOR CONSTRUCTION</b>	<b>\$31,866,137</b>
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Lexington High School  
Town of Lexington, MA

07-Oct-24

PSR Options Cost Estimate

GFA

440,816

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**BUILDING BACKUP - OPTION C.2.b**

**C20 STAIRCASES**

**C2010 STAIR CONSTRUCTION**

033000 CONCRETE

Concrete to stairs

20 flt 5,000.00 100,000

055000 MISCELLANEOUS METALS

Egress stairs w/ stainless steel rails and handrails

17 flt 50,000.00 850,000

Projection room stair, 4' wide

1 flt 40,000.00 40,000

Learning stair

Stainless steel guardrail

65 lf 425.00 27,625

Stainless steel handrail

55 lf 175.00 9,625

Adjacent stairs; 5'-3" wide

2 flt 75,000.00 150,000

Learning stair framing

Framing at learning stair - premium

1 ls 150,000.00 150,000

SUBTOTAL

1,327,250

**C2020 STAIR FINISHES**

090005 RESILIENT FLOORS

Stair finishes

20 flts 20,000.00 400,000

SUBTOTAL

400,000

**TOTAL - STAIRCASES**

**\$1,727,250**

**C30 INTERIOR FINISHES**

**C3010 WALL FINISHES**

Wall finishes complete package

440,816 gsf 17.00 7,493,872

SUBTOTAL

7,493,872

**C3020 FLOOR FINISHES**

Floor finishes complete package

440,816 gsf 15.00 6,612,240

SUBTOTAL

6,612,240

**C3030 CEILING FINISHES**

Ceiling finishes complete package

440,816 gsf 15.00 6,612,240

SUBTOTAL

6,612,240

**TOTAL - INTERIOR FINISHES**

**\$20,718,352**

**D10 CONVEYING SYSTEMS**

**D1010 ELEVATOR**

055000 MISCELLANEOUS METALS

Pit ladder and miscellaneous metals

3 ea 900.00 2,700

Sill angles

2 ls 1,500.00 3,000

142100 ELEVATOR

Electric traction elevator, 4 stop, 5,000lbs

3 ea 400,000.00 1,200,000

SUBTOTAL

1,205,700

**TOTAL - CONVEYING SYSTEMS**

**\$1,205,700**

**D20 PLUMBING**

**D20 PLUMBING, GENERALLY**

Air source heat pump water heater (2) 500MBH

1 ls 1,000,000.00 1,000,000

Plumbing package complete

440,816 gsf 28.00 12,342,848

SUBTOTAL

13,342,848

**TOTAL - PLUMBING**

**\$13,342,848**



PSR Options Cost Estimate

GFA

440,816

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**BUILDING BACKUP - OPTION C.2.b**

**D30 HVAC**

**D30 HVAC, GENERALLY**

Geothermal Wells 800' well	350	wells	65,000.00	22,750,000		
HVAC System; Water Source Heat Pump	440,816	gsf	90.00	39,673,440		
SUBTOTAL						62,423,440

**TOTAL - HVAC**

**\$62,423,440**

**D40 FIRE PROTECTION**

**D40 FIRE PROTECTION, GENERALLY**

Fire Equipment

Fire pump with controller 750GPM, incl Jockey pump with controller	1	ea	150,000.00	150,000		
Sprinkler system; complete	440,816	gsf	9.00	3,967,344		
SUBTOTAL						4,117,344

**TOTAL - FIRE PROTECTION**

**\$4,117,344**

**D50 ELECTRICAL**

**D5010 ELECTRICAL SYSTEMS**

**Gear & Distribution**

Normal power distribution system						
4000A 277/480V main switchboard	2	ea	185,000.00	370,000		
Panelboards/feeders	440,816	gsf	8.00	3,526,528		
<u>Emergency power</u>						
Emergency Generator; 1250 kW Diesel	1	ls	812,500.00	812,500		
Emergency power feeders	440,816	gsf	3.00	1,322,448		
<u>Photovoltaic - 3500 kW</u>						
PV system equipment; low roof top	27,703	sf	36.00	997,308		
PV system equipment; roof top; High roof (with Structure)	69,258	sf	60.00	4,155,480		
PV system equipment; canopy	102,250	sf	60.00	6,135,000		
Battery Storage	1	ls	2,500,000	2,500,000		
Transparent + opaque vertical cladding BIPV	10,000	sf	200.00	2,000,000		
<u>Equipment Wiring</u>						
Feeders + Electrical to equipment	440,816	gsf	10.00	4,408,160		
SUBTOTAL						26,227,424

**D5020 LIGHTING & POWER**

Lighting, Controls + Power	440,816	gsf	18.00	7,934,688		
SUBTOTAL						7,934,688

**D5030 COMMUNICATION & SECURITY SYSTEMS**

Telecommunications/PA + Clock	440,816	gsf	4.00	1,763,264		
<u>Performance lighting</u>						
Theater AV	1	ls	200,000.00	200,000		
Stage lighting fixture package	1	ls	250,000.00	250,000		
Audio Visual Systems	440,816	gsf	9.50	4,187,752		
Classroom speech + AV	225	rms	5,000.00	1,125,000		
<u>Specialty Communications Systems</u>						
BDA system, antenna and annunciator	440,816	sf	0.65	286,530		
Cell repeater/Distributed antenna system, not specified	440,816	sf	1.00	440,816		
Emergency 2 way communication system at elevator lobbies +stairs	1	ls	100,000.00	100,000		
<u>Fire Alarm</u>	440,816	gsf	4.00	1,763,264		
<u>Security System</u>	440,816	gsf	10.00	4,408,160		
SUBTOTAL						14,524,786

**D5040 OTHER ELECTRICAL SYSTEMS**

Common Work Results for Electrical

Lightning prevention	440,816	gsf	0.30	132,245		
Grounding	440,816	gsf	0.40	176,326		
Misc. demolition work	440,816	gsf	0.25	110,204		





PSR Options Cost Estimate

GFA

440,816

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**BUILDING BACKUP - OPTION C.2.b**

Temp power and lights	440,816	gsf	1.20	528,979		
Seismic restraints/Coordination/misc.	440,816	gsf	3.00	1,322,448		
SUBTOTAL						2,270,202

<b>TOTAL - ELECTRICAL</b>	<b>\$50,957,100</b>
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**E10 EQUIPMENT**

**E10 EQUIPMENT, GENERALLY**

**112000 LOADING DOCK EQUIPMENT**

Loading dock leveler(2), truck restraints (2) and bumpers	1	ls	50,000.00	50,000		
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**110620 THEATRICAL EQUIPMENT**

*Allowance per Architect*

Stage lighting and fixtures - equipment only	1	ls	358,000.00	358,000		
Stage rigging, installed	1	ls	275,000.00	275,000		
Stage curtains, installed	1	ls	88,385.00	88,385		
Forestage Platforms, installed	1	ls	100,000.00	100,000		
Orchestra Enclosure, installed	1	ls	175,000.00	175,000		
Orchestra Pit Lift	1	ls	150,000.00	150,000		
Auditorium AV Equipment					See Electrical	

**113100 APPLIANCES**

Residential appliances - allowance	1	ls	60,000.00	60,000		
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**114000 FOOD SERVICE EQUIPMENT**

Kitchen equipment	1	ls	250,000.00	250,000		
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**115300 EDUCATIONAL EQUIPMENT**

Science equipment;	1	ls	400,000.00	400,000		
Kiln	1	ea	5,000.00	5,000		
Allowance for miscellaneous equipment	1	ls	50,000	50,000		

**116600 GYM EQUIPMENT**

Gym Equipment	1	ls	500,000.00	500,000		
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**126000 SEATING**

Auditorium seating	1,000	seat	400.00	400,000		
SUBTOTAL						2,861,385

<b>TOTAL - EQUIPMENT</b>	<b>\$2,861,385</b>
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**E20 FURNISHINGS**

**E2010 FIXED FURNISHINGS**

**122100 WINDOW TREATMENT**

Window shades at exterior glazing including blackout shades at art & science classrooms - allowance	33.577	sf	10.00	335,770		
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**123553 CASEWORK**

Casework package	440,816	gsf	12.00	5,289,792		
SUBTOTAL						5,625,562

**E2020 MOVABLE FURNISHINGS**

All movable furnishings to be provided and installed by owner						
SUBTOTAL					NIC	

<b>TOTAL - FURNISHINGS</b>	<b>\$5,625,562</b>
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**F10 SPECIAL CONSTRUCTION**

**F10 SPECIAL CONSTRUCTION**

Pre-engineered Greenhouse	1	ls	150,000.00	150,000		
SUBTOTAL						150,000

<b>TOTAL - SPECIAL CONSTRUCTION</b>	<b>\$150,000</b>
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PSR Options Cost Estimate

GFA

440,816

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION C.2.b

**F20 SELECTIVE BUILDING DEMOLITION**

**F2010 BUILDING ELEMENTS DEMOLITION**

No items in this section

SUBTOTAL

**F2020 HAZARDOUS COMPONENTS ABATEMENT**

See main summary for HazMat allowance

See Summary

SUBTOTAL

**TOTAL - SELECTIVE BUILDING DEMOLITION**

SUBTOTAL

**\$271,388,482**

PSR Options Cost Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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SITEWORK C.2.b

<b>G</b>	<b>SITEWORK</b>						
<b>G10</b>	<b>SITE PREPARATION &amp; DEMOLITION</b>	2,015,000	sf				
311000	GENERAL CONDITIONS						
	Mobilizations/Temp Parking/Etc.	1	ls	500,000.00	500,000		
	6' high site construction fence - perimeter	7,500	lf	18.00	135,000		
311000	SITE DEMOLITION AND RELOCATIONS						
	Demolish existing site conditions	1	ls	900,000.00	900,000		
311000	UTILITY DEMOLITION						
	Demolish existing utility lines	1	ls	250,000.00	250,000		
	Utility Support/Ground Improvements	1	ls	1,500,000.00	1,500,000		
311000	VEGETATION & TOPSOIL MANAGEMENT						
	Strip + dispose topsoil (swell 25%)	23,264	cy	37.00	860,768		
	Street sweeping allowance during hauling	1	ls	50,000.00	50,000		
311000	CLEAR GRASSY KNOLL						
	Remove trees/vegetation	1	ls	10,000.00	10,000		
	Strip + dispose topsoil	1,600	cy	37.00	59,200		
	Rock removal; mechanical	1,600	cy	85.00	136,000		
312000	EROSION & SEDIMENT CONTROL						
	Silt Fence; installation and removal	7,500	lf	12.00	90,000		
	Erosion Control monitoring & maintenance	1	ls	80,000.00	80,000		
312000	SITE EARTHWORK						
	<u>Site cut to design subgrade</u>	0	cy				
	Cut	0	cy	20.00			
	Store cut onsite					NR	
	Process cut and amend with additional soils for reuse					NR	
	Imported fill	64,000	cy	40.00	2,560,000		
312000	SOIL DISPOSAL - conversion factor 1.7 to tons						
	Load excess soils for disposal						
	Less than RCS-1 - clean non-regulated	1	ls			NR	
312000	ESTABLISHING GRADE						
	Sub grade establishment	2,015,000	sf	0.15	302,250		
	Fine grading throughout the site	2,015,000	sf	0.25	503,750		
	General rock removal	3,400	cy	85.00	289,000		
312000	HAZARDOUS MATERIALS						
	UST removal allowance					NR	
	Soil disposal & replacement allowance					See Summary	
	SUBTOTAL						8,225,968
<b>G20</b>	<b>SITE IMPROVEMENTS</b>						
	<b>Roadways and Parking Lots</b>						
	<u>Bituminous concrete pavement - standard</u>	286,400	sf				
	gravel base; 8" thick	22,143	cy	50.00	1,107,150		
	asphalt top; 1.5" thick	2,738	tns	200.00	547,600		
	asphalt binder; 2" thick	3,658	tns	190.00	695,020		
	<u>Porous Pavement</u>	71,600	sf				
	Choker course; 4" thick crushed stone	1,127	cy	75.00	84,525		
	Filter course; 8" thick gravel	2,221	cy	65.00	144,365		
	Reservoir course; 8" thick crushed stone	2,221	cy	55.00	122,155		
	Porous pavement; 4" thick	1,807	tns	400.00	722,800		
	Geotextiles to paving	358,000	sf	1.50	537,000		
320000	CURBING						
	Vertical granite curb	19,000	lf	55.00	1,045,000		

PSR Options Cost Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>SITEWORK C.2.b</b>							
320000	<b>ROAD MARKINGS AND SIGNS</b>						
	Parking spot	500	ea	85.00	42,500		
	Parking spot ADA premium	45	ea	250.00	11,250		
	Pavement markings/signage allowance	1	ls	100,000.00	100,000		
	SUBTOTAL					5,159,365	
320000	<b>PEDESTRIAN PAVING</b>						
	<u>Concrete sidewalks</u>	115,000	sf				
	gravel base; 12" thick	5,324	cy	50.00	266,200		
	Broom finish concrete paving; 5" thick	115,000	sf	16.00	1,840,000		
	<u>Concrete pads</u>	1,500	sf				
	gravel base; 12" thick	104	cy	50.00	5,200		
	Broom finish concrete paving; 8" thick	1,500	sf	24.00	36,000		
	<u>Porous concrete pavers; 20% of Plaza</u>	17,000	sf				
	Open graded stone subbase AASHTO #2; 32" thick	2,101	cy	50.00	105,050		
	Open graded base AASHTO #57; 6" thick	394	cy	50.00	19,700		
	Open graded bedding course AASHTO #8; 2" thick	131	cy	65.00	8,515		
	Pavers	17,000	sf	28.00	476,000		
	Geotextiles on top, bottom and sides of subbase	3,778	sy	3.00	11,334		
	<u>Concrete paving; 80% of Plaza</u>	68,000	sf				
	gravel base; 12" thick	3,148	cy	50.00	157,400		
	Broom finish concrete paving; 5" thick	68,000	sf	18.00	1,224,000		
320000	<b>STAIRS AND RAMPS</b>						
	Ramp/stairs premium	1	ls	250,000.00	250,000		
	SUBTOTAL					4,399,399	
320000	<b>SITE IMPROVEMENTS</b>						
320000	<b>SITE FURNISHINGS</b>						
	Bollards/bike racks/benches/flag poles etc.	1	ls	1,000,000.00	1,000,000		
	New restroom/tickets/concessions building	1,000	sf	700.00	700,000		
320000	<b>EXISTING STADIUM + TRACK ETR</b>					No Costs Assumed	
	Grass fields; sod	360,000	sf				
	Varsity Baseball Diamond; C1	100,000	sf	6.00	600,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	60,000.00	60,000		
	Varsity Softball Diamond; C2	55,000	sf	6.00	330,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	30,000.00	30,000		
	Junior Varsity Baseball Diamond; C3 + Cricket	60,000	sf	6.00	360,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	50,000.00	50,000		
	Little League Diamond; C4	40,000	sf	6.00	240,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	30,000.00	30,000		
	Crumb football field; C5	60,000	sf	6.00	360,000		
	Worthen practice field; C6	45,000	sf	6.00	270,000		
	Tennis courts + Basketball courts					ETR	
320000	<b>ATHLETIC EQUIPMENT</b>						
	Equipment allowance	1	ls	180,000.00	180,000		
320000	<b>BLEACHERS AND SCOREBOARDS</b>						

PSR Options Cost Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>SITEWORK C.2.b</b>							
	Bleachers + pressbox	1,000	seat	900.00	900,000		
	Electronic scoreboard; wireless controls, multiboard	1	ea	75,000.00	75,000		
	Electronic scoreboard; softball	1	ea	45,000.00	45,000		
320000	FENCING						
	Fencing allowance	1	ls	500,000.00	500,000		
	SUBTOTAL					6,090,000	
320000	SITE WALLS						
	Retaining walls/site walls/seat walls	1	ls	750,000.00	750,000		
	SUBTOTAL					750,000	
	<b>Landscaping</b>						
329900	LAWN AND SEED						
	Topsoil - imported 12" thick; swell 25%	15,741	cy	65.00	1,023,165		
	General Seeding	850,000	sf	0.50	425,000		
	Trees, Shrubs and Perennial planting area	1	ls	1,500,000.00	1,500,000		
	IRRIGATION						
	Irrigation area	360,000	sf	1.50	540,000		
	Wetlands reconstruction	4,714	sf	20.00	NR		
	SUBTOTAL					3,488,165	
G30	CIVIL MECHANICAL UTILITIES						
210000	FIRE PROTECTION						
	12" CLDI	4,000	lf	150.00	600,000		
	8" CLDI	200	lf	100.00	20,000		
	6" CLDI	100	lf	95.00	9,500		
	Fire department connection	1	ea	2,500.00	2,500		
	Gate valve; hydrants	1	ls	60,000.00	60,000		
331000	CONNECTIONS						
	Connect to existing water line; 12" live tap	2	ea	15,000.00	30,000		
312000	EXCAVATION & BACKFILL						
	DI piping excavation/backfill (inside site)	4,300	lf	50.00	215,000		
	Pressure test & chlorinate	4,300	lf	7.50	32,250		
	Allowance for temporary water service	1	ea	25,000.00	25,000		
	Allowance for temporary support of existing utilities				NR		
	SUBTOTAL					994,250	
333000	SANITARY SEWER						
	PVC sewer pipe	2,368	lf	60.00	142,080		
	Sewer manholes	7	ea	6,000.00	42,000		
	Connection to existing	2	loc	15,000.00	30,000		
	Grease trap - 6,000 gal.	2	ea	35,000.00	70,000		
	SUBTOTAL					284,080	
334000	STORM DRAINAGE						
	Infiltration systems	11,500	sf	45.00	517,500		
	Hydrodynamic separators	6	ea	20,000.00	120,000		
	Storm systems; complete at parking; piping; CB + MH etc.	286,400	sf	10.00	2,864,000		
	<u>Sodded Athletic fields</u>						
	Drainage at field	360,000	sf	1.00	Included w/fields		
	SUBTOTAL					3,501,500	
G40	ELECTRICAL UTILITIES						
	Concrete:						
	Primary duct bank 6-5" duct bank	900	lf	50.00	45,000		
	Secondary service 4000A - two services	200	lf	50.00	10,000		
	Generator duct bank	100	lf	40.00	4,000		
	PV 5000A secondary service (10) - 4"C	100	lf	60.00	6,000		
	Communications duct bank 6-4"	750	lf	40.00	30,000		
	Transformer/generator pad	6	ea	3,000.00	18,000		

PSR Options Cost Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>SITEWORK C.2.b</b>							
	Site lighting pole bases	56	ea	500.00	28,000		
	Excavation and backfill:						
	Primary duct bank 2-5" duct bank	900	lf	25.00	22,500		
	Secondary service 4000A	200	lf	30.00	6,000		
	Storage building 400A service	40	lf	22.00	880		
	Generator duct bank	100	lf	30.00	3,000		
	PV 5000A secondary service (10) - 4"C	100	lf	45.00	4,500		
	EV conduits				See Below		
	Communications duct bank 4-4"	750	lf	25.00	18,750		
	Site lighting circuitry	5,200	lf	6.00	31,200		
	2-2" PVC to sports field lighting	1,200	lf	10.00	12,000		
	CCTV circuitry	1,200	lf	6.00	7,200		
	Scoreboard power & data, misc. sports field power, allow	1,000	lf	6.00	6,000		
	SUBTOTAL					253,030	
	<u>Power</u>						
	<b>Site electrical 15 kVOLT- Transformers etc.</b>	1	ls	2,500,000.00	By Owner		
	Utility co. back charges				Included above		
	Primary duct bank	900	lf	180.00	162,000		
	Electric manhole	6	ea	12,500.00	75,000		
	Transformers + 15kVolt switchgear by Owner				Included above		
	Secondary service 4000A	200	lf	1,400.00	280,000		
	Generator:						
	Generator service	100	lf	400.00	40,000		
	PV:						
	PV 5000A secondary service (10) - 4"C	400	lf	600.00	240,000		
	<u>Communications</u>						
	Connect to existing utility pole	1	ea	1,500.00	1,500		
	Communications duct bank	750	lf	150.00	112,500		
	Communication manhole	2	ea	12,500.00	25,000		
	<u>Site Lighting</u>						
	Allowance	360,000	sf	2.00	720,000		
	<u>EV Stations</u>						
	EV stations; single	20	loc	15,000.00	300,000		
	EV stations; EV ready; conduit only	75	loc	4,000.00	300,000		
	EV stations; EV ready; conduit + wiring	50	loc	7,000.00	350,000		
	<u>Sports Fields</u>						
	Sports field lighting, allow 1 baseball field; 1 softball field + rectangle field	2	loc	460,000.00	920,000		
	Fixture MUSCO				Included above		
	Sports field lighting circuitry	1,200	lf	12.00	Included above		
	Scoreboard power & data, misc. sports field power, allow	1	ls	10,000.00	Included above		
	Rough-in, allow	1	ls	35,000.00	Included above		
	<u>Site Demolition</u>						
	Site demolition work				Included w/ building		
	SUBTOTAL					3,526,000	
<b>TOTAL - SITE DEVELOPMENT</b>							<b>\$36,671,757</b>



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GFA 440,816

## CONSTRUCTION COST SUMMARY

BUILDING SYSTEM		SUB-TOTAL	TOTAL	\$/SF	%
<b>BUILDING SUMMARY - OPTION C.5b</b>					
<b>A10</b>	<b>FOUNDATIONS</b>				
A1010	Standard Foundations	\$4,492,250			
A1020	Special Foundations	\$6,055,455			
A1030	Lowest Floor Construction	\$5,537,720	<b>\$16,085,425</b>	\$36.49	5.8%
<b>A20</b>	<b>BASEMENT CONSTRUCTION</b>				
A2010	Basement Excavation	\$0			
A2020	Basement Walls	\$0	<b>\$0</b>	\$0.00	0.0%
<b>B10</b>	<b>SUPERSTRUCTURE</b>				
B1010	Upper Floor Construction	\$16,933,043			
B1020	Roof Construction	\$9,366,156	<b>\$26,299,199</b>	\$59.66	9.5%
<b>B20</b>	<b>EXTERIOR CLOSURE</b>				
B2010	Exterior Walls	\$19,689,774			
B2020	Windows	\$8,853,029			
B2030	Exterior Doors	\$440,816	<b>\$28,983,619</b>	\$65.75	10.5%
<b>B30</b>	<b>ROOFING</b>				
B3010	Roof Coverings	\$7,855,541			
B3020	Roof Openings	\$54,000	<b>\$7,909,541</b>	\$17.94	2.9%
<b>C10</b>	<b>INTERIOR CONSTRUCTION</b>				
C1010	Partitions	\$19,786,516			
C1020	Interior Doors	\$5,399,528			
C1030	Specialties/Millwork	\$6,680,093	<b>\$31,866,137</b>	\$72.29	11.6%
<b>C20</b>	<b>STAIRCASES</b>				
C2010	Stair Construction	\$1,217,250			
C2020	Stair Finishes	\$360,000	<b>\$1,577,250</b>	\$3.58	0.6%
<b>C30</b>	<b>INTERIOR FINISHES</b>				
C3010	Wall Finishes	\$7,493,872			
C3020	Floor Finishes	\$6,612,240			
C3030	Ceiling Finishes	\$6,612,240	<b>\$20,718,352</b>	\$47.00	7.5%
<b>D10</b>	<b>CONVEYING SYSTEMS</b>				
D1010	Elevator	\$1,207,200	<b>\$1,207,200</b>	\$2.74	0.4%



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## CONSTRUCTION COST SUMMARY

BUILDING SYSTEM	SUB-TOTAL	TOTAL	\$/SF	%
<b>BUILDING SUMMARY - OPTION C.5b</b>				
<b>D20 PLUMBING</b>				
D20 Plumbing	\$13,342,848	<b>\$13,342,848</b>	\$30.27	4.8%
<b>D30 HVAC</b>				
D30 HVAC	\$62,423,440	<b>\$62,423,440</b>	\$141.61	22.6%
<b>D40 FIRE PROTECTION</b>				
D40 Fire Protection	\$4,117,344	<b>\$4,117,344</b>	\$9.34	1.5%
<b>D50 ELECTRICAL</b>				
D5010 Complete System	\$50,206,180	<b>\$50,206,180</b>	\$113.89	18.2%
<b>E10 EQUIPMENT</b>				
E10 Equipment	\$5,111,385	<b>\$5,111,385</b>	\$11.60	1.9%
<b>E20 FURNISHINGS</b>				
E2010 Fixed Furnishings	\$5,696,552			
E2020 Movable Furnishings	NIC	<b>\$5,696,552</b>	\$12.92	2.1%
<b>F10 SPECIAL CONSTRUCTION</b>				
F10 Special Construction	\$150,000	<b>\$150,000</b>	\$0.34	0.1%
<b>F20 HAZMAT REMOVALS</b>				
F2010 Building Elements Demolition	\$0			
F2020 Hazardous Components Abatement	\$0	<b>\$0</b>	\$0.00	0.0%

**TOTAL DIRECT COST (Trade Costs)**

**\$275,694,472** \$625.42 100.0%





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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**BUILDING BACKUP - OPTION C.5b**

**GROSS FLOOR AREA CALCULATION**

Level 1	173,013
Level 2	115,000
Level 3	110,000
Level 4	42,803

**TOTAL GROSS FLOOR AREA (GFA)**

**440,816 sf**

**A10 FOUNDATIONS**

**A1010 STANDARD FOUNDATIONS**

Strip Footings: 1 x 3

Formwork	5,702	sf	15.00	85,530
Re-bar	37,633	lbs.	2.50	94,083
Concrete material	333	cy	160.00	53,280
Placing concrete	333	cy	120.00	39,960

Perimeter foundation walls: 20" Thick x 3.5 ft H

Formwork	19,957	sf	21.00	419,097
Re-bar	49,893	lbs.	2.50	124,733
Concrete material	648	cy	160.00	103,680
Placing concrete	648	cy	120.00	77,760
Form shelf	2,851	lf	8.00	22,808

Spread Footings: 9 x 9 x 2 (Three Story)

Formwork	11,376	sf	18.00	204,768
Re-bar	76,788	lbs.	2.50	191,970
Concrete material	995	cy	160.00	159,200
Placing concrete	995	cy	120.00	119,400
Set anchor bolts grout plates	158	ea	250.00	39,500

Spread Footings: 10 x 10 x 2 (Four Story)

Formwork	22,000	sf	18.00	396,000
Re-bar	165,000	lbs.	2.50	412,500
Concrete material	2,139	cy	160.00	342,240
Placing concrete	2,139	cy	120.00	256,680
Set anchor bolts grout plates	275	ea	250.00	68,750

Piers

Formwork	5,196	sf	24.00	124,704
Re-bar	58,455	lbs.	2.50	146,138
Concrete material	202	cy	160.00	32,320
Placing concrete	202	cy	160.00	32,320
Housekeeping pads	1	ls	30,000.00	30,000

070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Dampproofing @ foundation wall	11,404	sf	4.00	45,616
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072100 THERMAL INSULATION

Rigid insulation to face of foundation wall; 4" R-20	11,404	sf	5.00	57,020
Brick Shelf 4" insulation	2,851	lf	20.00	57,020

312000 EARTHWORK

Strip footings

Excavation	3,168	cy	14.00	44,352
Reuse excess material on site	981	cy	15.00	14,715
Backfill with select fill	2,187	cy	25.00	54,675

Spread footings

Excavation	8,699	cy	14.00	121,786
Reuse excess material on site	3,336	cy	15.00	50,040
Backfill with select fill	5,363	cy	25.00	134,075

Miscellaneous

Foundation drain	2,851	lf	30.00	85,530
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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>BUILDING BACKUP - OPTION C.5b</b>							
	Temporary dewatering for foundation work	1	ls	250,000.00	250,000		
	SUBTOTAL					4,492,250	
<b>A1020</b>	<b>SPECIAL FOUNDATIONS</b>						
	Rigid inclusions	173,013	sf	35.00	6,055,455		
	SUBTOTAL					6,055,455	
<b>A1030</b>	<b>LOWEST FLOOR CONSTRUCTION</b>						
033000	CONCRETE						
	Vapor barrier, 15mils	173,013	sf	1.25	216,266		
	Slab on grade	173,013	sf				
	WWF reinforcement	198,965	sf	1.85	368,085		
	Concrete - 5" thick	2,759	cy	170.00	469,030		
	Placing concrete	2,759	cy	65.00	179,335		
	Finishing and curing concrete	173,013	sf	3.00	519,039		
	Control joints - saw cut	173,013	sf	0.10	17,301		
	Miscellaneous						
	Equipment pads	1	ls	30,000.00	30,000		
	Loading dock	1	ls	50,000.00	50,000		
	Elevator pits	3	ea	40,000.00	120,000		
	Radon system				Excluded; NR		
072100	THERMAL INSULATION						
	Perimeter insulation, 4" thick R-20 - 6ft at perimeter	17,106	sf	5.00	85,530		
	Under slab insulation, 2" thick under slab	155,907	sf	3.00	467,721		
312000	EARTHWORK						
	Gravel base, 12"	6,408	cy	45.00	288,360		
	Structural fill	37,000	cy	55.00	2,035,000		
	Allowance for underslab drainage	173,013	sf	2.00	346,026		
	Compact existing sub-grade	173,013	sf	0.50	86,507		
	Underslab E&B for plumbing	173,013	sf	1.50	259,520		
	SUBTOTAL					5,537,720	
<b>TOTAL - FOUNDATIONS</b>							<b>\$16,085,425</b>
<b>A20</b>	<b>BASEMENT CONSTRUCTION</b>						
<b>A2010</b>	<b>BASEMENT EXCAVATION</b>						
	No Work in this section						
	SUBTOTAL					-	
<b>A2020</b>	<b>BASEMENT WALLS</b>						
	No Work in this section						
	SUBTOTAL					-	
<b>TOTAL - BASEMENT CONSTRUCTION</b>							
<b>B10</b>	<b>SUPERSTRUCTURE</b>						
<b>B1010</b>	<b>FLOOR CONSTRUCTION</b>						
		14.6	lbs/sf				
		3,214	tns				
		\$6,550	\$/Ton				
							including canopies + roof screens
033000	CONCRETE						
	WWF reinforcement	307,973	sf	1.85	569,750		
	Concrete Fill to metal deck; lightweight, total thickness 6 1/4"	5,416	cy	190.00	1,029,040		
	Place and finish concrete	267,803	sf	3.00	803,409		
	Rebar to decks	80,341	lbs	2.00	160,682		
051200	STRUCTURAL STEEL FRAMING						
	Structural steel framing; Complete; 15 lbs per SF	2,009	tns	5,000.00	10,045,000		
	Steel premium for lateral system due to poor soils; 1 PSF	134	tns	5,000.00	670,000		
	Moment connections	100	ea	750.00	75,000		
	Shear studs	66,951	ea	3.50	234,329		
	3" metal galvanized floor deck	267,803	sf	8.00	2,142,424		



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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**BUILDING BACKUP - OPTION C.5b**

	Expansion joints	1	ls	100,000.00	100,000		
078100	<b>FIREPROOFING/FIRESTOPPING</b>						
	Fire proofing to columns and beams; 2 hr	267,803	sf	3.00	803,409		
	Intumescent paint @ architecturally exposed beams and columns - allow	1	ls	300,000.00	300,000		
	<b>SUBTOTAL</b>					16,933,043	

**B1020 ROOF CONSTRUCTION**

033000	<b>CONCRETE</b>						
	6" Normal weight concrete deck at low roof and at mechanical equipment pads	35,000	sf	9.00	315,000		
051200	<b>STRUCTURAL STEEL FRAMING</b>						
	Structural steel framing; Complete; 13 lbs per SF	1,125	tns	5,000.00	5,625,000		
	Structural steel framing; 2 lbs per SF premium at RTU's	35	tns	5,000.00	175,000		
	Steel premium for lateral system due to poor soils; 1 PSF	87	tns	5,000.00	435,000		
	Roof screens	80	tns	5,500.00	440,000		
	<u>Decking</u>						
	1 1/2" galvanized metal deck, typical	173,013	sf	7.00	1,211,091		
078100	<b>FIREPROOFING/FIRESTOPPING</b>						
	Fireproofing to columns, beams and deck; 1 hr - includes Intumescent	173,013	sf	5.00	865,065		
	Intumescent paint @ architecturally exposed beams and columns - allow	1	ls	300,000.00	300,000		
	<b>SUBTOTAL</b>					9,366,156	

<b>TOTAL - SUPERSTRUCTURE</b>						<b>\$26,299,199</b>	
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**B20 EXTERIOR CLOSURE**

**B2010 EXTERIOR WALLS**  
**Exterior Wall Area**

162,702 Total closure area  
122,027 sf total area solid

042000	<b>MASONRY</b>						
	Mockup	1	ls	100,000.00	100,000		
	Brick veneer; 60% of Solid	73,216	sf	44.00	3,221,504		
	Granite veneer base; 2%	2,441	sf	120.00	292,920		
	Precast trim allowance	1	ls	1,200,000.00	1,200,000		
	4" CMU wall at auditorium	9,000	sf	30.00	270,000		
	8" Mineral wool at exterior closure (2 layers 4")	122,027	sf	7.50	915,203		
	Miscellaneous flashings and sealants	122,027	sf	1.50	183,041		
	Staging to exterior wall	122,027	sf	4.00	488,108		
055000	<b>MISC. METALS</b>						
	Misc. metals at masonry including loose lintels (relieving angles included in steel tns)	73,216	sf	1.50	109,824		
070001	<b>WATERPROOFING, DAMPPROOFING AND CAULKING</b>						
	Air barrier	122,027	sf	10.00	1,220,270		
	Miscellaneous sealants to closure	122,027	sf	1.00	122,027		
072100	<b>THERMAL INSULATION</b>						
	4" cellulose insulation in stud	122,027	sf	3.25	396,588		
	Insulation at glazed openings	13,559	lf	6.00	81,354		
076400	<b>CLADDING</b>						
	Composite metal panel, Alucobond or equal; 18%	21,965	sf	100.00	2,196,500		
	Terracotta; 20%	24,405	sf	160.00	3,904,800		
	Canopies; soffit + framing	4,000	sf	100.00	400,000		
	12' high Acoustic Equipment Screen	16,000	sf	95.00	1,520,000		

**EXPANSION JOINT COVERS**



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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>BUILDING BACKUP - OPTION C.5b</b>							
	Thermal breaks	1	ls	50,000.00	50,000		
	Expansion joints	1	ls	100,000.00	100,000		
092900	GYPSUM BOARD ASSEMBLIES						
	Exterior wall;						
	6" Stud backup	122,027	sf	16.00	1,952,432		
	Gypsum Sheathing	122,027	sf	3.50	427,095		
	Drywall lining to interior face of stud backup	122,027	sf	4.00	488,108		
101400	SIGNAGE						
	Exterior signage - allowance	1	ls	50,000.00	50,000		
	SUBTOTAL					19,689,774	
<b>B2020</b>	<b>WINDOWS</b>						
	Exterior Wall Area	40,676	sf				
061000	ROUGH CARPENTRY						
	Wood blocking at openings	13,559	lf	10.00	135,590		
070001	WATERPROOFING, DAMPPROOFING AND CAULKING						
	Air barrier/flashing at windows	13,559	lf	10.00	135,590		
	Backer rod & double sealant	13,559	lf	11.00	149,149		
080001	METAL WINDOWS						
	Aluminum windows, triple glazed including interior and exterior trim per details	20,338	sf	175.00	3,559,150		
	Curtainwall, triple glazed including allowance for interior and exterior trim details	20,338	sf	225.00	4,576,050		
	Horizontal aluminum fin sunshades @ 40% of windows, custom color	1,700	lf	175.00	297,500		
	Passive house premium					NR	
089000	LOUVERS						
	Louvers					N/A	
	SUBTOTAL					8,853,029	
<b>B2030</b>	<b>EXTERIOR DOORS</b>						
	Allowance for exterior doors	440,816	gsf	1.00	440,816		
	SUBTOTAL					440,816	
<b>TOTAL - EXTERIOR CLOSURE</b>							<b>\$28,983,619</b>

**B30 ROOFING**

055000	MISCELLANEOUS METALS						
	Terrace top rail/ladders/stairs	1	ls	80,000.00	80,000		
061000	ROUGH CARPENTRY						
	Rough carpentry and blocking @ roof	173,013	sf	1.50	259,520		
070002	ROOFING AND FLASHING	173,013	total area				
	PVC roof membrane system, white or gray, 1/2" coverboard, 10" polyiso insulation, vapor barrier	173,013	sf	33.00	5,709,429		
	Canopy roofing	4,000	sf	28.00	112,000		
	Plaza deck pavers system at terrace	14,322	sf	70.00	1,002,540		
	Miscellaneous Roofing						
	Miscellaneous flashings/copings/walkway pads etc.	173,013	sf	4.00	692,052		
	SUBTOTAL					7,855,541	
<b>B3020</b>	<b>ROOF OPENINGS</b>						
086300	ROOF SKYLIGHTS						
	Aluminum framed skylight (4loc)				None Assumed		
	Smoke vents; 7'x7'	3	ea	18,000.00	54,000		



PSR Options Cost Estimate

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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**BUILDING BACKUP - OPTION C.5b**

SUBTOTAL

54,000

<b>TOTAL - ROOFING</b>	<b>\$7,909,541</b>
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**C10 INTERIOR CONSTRUCTION**

**C1010 PARTITIONS**

**040001 MASONRY**

Allowance for masonry partitions 440,816 gsf 6.00 2,644,896

**061000 ROUGH CARPENTRY**

Backer panels in electrical closets 1 ls 10,000.00 10,000

Wood blocking at interiors 440,816 gsf 0.50 220,408

**078400 FIREPROOFING/FIRESTOPPING**

Fire stopping including slab edges and core 440,816 gsf 1.00 440,816

**070001 WATERPROOFING, DAMPPROOFING AND CAULKING**

Miscellaneous sealants throughout building 440,816 gsf 1.25 551,020

**078150 EXPANSION JOINTS**

Allowance for expansion joint covers 1 ls 50,000.00 50,000

**081110 INTERIOR GLAZING**

Allowance for interior glazing 440,816 gsf 3.00 1,322,448

**092900 GYPSUM BOARD ASSEMBLIES**

Allowance for GWB partitions 440,816 gsf 33.00 14,546,928

SUBTOTAL

19,786,516

**C1020 INTERIOR DOORS**

Doors, frames, hardware; complete 440,816 gsf 8.00 3,526,528

Fire shutters 1 ls 150,000.00 150,000

Security doors 16 loc 25,000.00 400,000

Premium for electronic hardware 882 set 1,500.00 1,323,000

SUBTOTAL

5,399,528

**C1030 SPECIALTIES / MILLWORK**

**055000 MISCELLANEOUS METALS**

Miscellaneous metals throughout building 440,816 gsf 5.00 2,204,080

**061000 ROUGH CARPENTRY**

**062000 INTERIOR ARCHITECTURAL WOODWORK**

Interior millwork package 440,816 gsf 3.00 1,322,448

**101100 VISUAL DISPLAY SURFACES**

Markerboard and tackboard package 440,816 gsf 2.00 881,632

**101400 SIGNAGE**

Room identification, directional & safety signage, building directory + environmental graphics 440,816 gsf 2.00 881,632

**102800 TOILET ACCESSORIES**

Toilet accessories/compartments 440,816 gsf 1.00 440,816

**104400 FIRE PROTECTION SPECIALTIES**

Fire extinguisher cabinets 1 ls 65,852.71 65,853

AED cabinets 1 ls 2,000.00 2,000

**105000 LOCKERS**

Student lockers 440,816 gsf 2.00 881,632

SUBTOTAL

6,680,093

<b>TOTAL - INTERIOR CONSTRUCTION</b>	<b>\$31,866,137</b>
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PSR Options Cost Estimate

GFA

440,816

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**BUILDING BACKUP - OPTION C.5b**

**C20 STAIRCASES**

**C2010 STAIR CONSTRUCTION**

033000 CONCRETE

Concrete to stairs

18 flt 5,000.00 90,000

055000 MISCELLANEOUS METALS

Egress stairs w/ stainless steel rails and handrails

15 flt 50,000.00 750,000

Projection room stair, 4' wide

1 flt 40,000.00 40,000

Learning stair

Stainless steel guardrail

65 lf 425.00 27,625

Stainless steel handrail

55 lf 175.00 9,625

Adjacent stairs; 5'-3" wide

2 flt 75,000.00 150,000

Learning stair framing

Framing at learning stair - premium

1 ls 150,000.00 150,000

SUBTOTAL

1,217,250

**C2020 STAIR FINISHES**

090005 RESILIENT FLOORS

Stair finishes

18 flts 20,000.00 360,000

SUBTOTAL

360,000

**TOTAL - STAIRCASES**

**\$1,577,250**

**C30 INTERIOR FINISHES**

**C3010 WALL FINISHES**

Wall finishes complete package

440,816 gsf 17.00 7,493,872

SUBTOTAL

7,493,872

**C3020 FLOOR FINISHES**

Floor finishes complete package

440,816 gsf 15.00 6,612,240

SUBTOTAL

6,612,240

**C3030 CEILING FINISHES**

Ceiling finishes complete package

440,816 gsf 15.00 6,612,240

SUBTOTAL

6,612,240

**TOTAL - INTERIOR FINISHES**

**\$20,718,352**

**D10 CONVEYING SYSTEMS**

**D1010 ELEVATOR**

055000 MISCELLANEOUS METALS

Pit ladder and miscellaneous metals

3 ea 900.00 2,700

Sill angles

3 ls 1,500.00 4,500

142100 ELEVATOR

Electric traction elevator, 4 stop, 5,000lbs

3 ea 400,000.00 1,200,000

SUBTOTAL

1,207,200

**TOTAL - CONVEYING SYSTEMS**

**\$1,207,200**

**D20 PLUMBING**

**D20 PLUMBING, GENERALLY**

Air source heat pump water heater (2) 500MBH

1 ls 1,000,000.00 1,000,000

Plumbing package complete

440,816 gsf 28.00 12,342,848

SUBTOTAL

13,342,848

**TOTAL - PLUMBING**

**\$13,342,848**



PSR Options Cost Estimate

GFA

440,816

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**BUILDING BACKUP - OPTION C.5b**

**D30 HVAC**

**D30 HVAC, GENERALLY**

Geothermal Wells 800' well	350	wells	65,000.00	22,750,000		
HVAC System; Water Source Heat Pump	440,816	gsf	90.00	39,673,440		
SUBTOTAL						62,423,440

**TOTAL - HVAC**

**\$62,423,440**

**D40 FIRE PROTECTION**

**D40 FIRE PROTECTION, GENERALLY**

Fire Equipment

Fire pump with controller 750GPM, incl Jockey pump with controller	1	ea	150,000.00	150,000		
Sprinkler system; complete	440,816	gsf	9.00	3,967,344		
SUBTOTAL						4,117,344

**TOTAL - FIRE PROTECTION**

**\$4,117,344**

**D50 ELECTRICAL**

**D5010 ELECTRICAL SYSTEMS**

**Gear & Distribution**

Normal power distribution system						
4000A 277/480V main switchboard	2	ea	185,000.00	370,000		
Panelboards/feeders	440,816	gsf	8.00	3,526,528		
<u>Emergency power</u>						
Emergency Generator; 1250 kW Diesel	1	ls	812,500.00	812,500		
Emergency power feeders	440,816	gsf	3.00	1,322,448		
<u>Photovoltaic - 3500 kW</u>						
PV system equipment; low roof top	31,738	sf	36.00	1,142,568		
PV system equipment; roof top; High roof (with Structure)	79,345	sf	60.00	4,760,700		
PV system equipment; canopy	102,250	sf	60.00	6,135,000		
Battery Storage	1	ls	2,500,000	2,500,000		
Transparent + opaque vertical cladding BIPV	2,493	sf	200.00	498,600		
<u>Equipment Wiring</u>						
Feeders + Electrical to equipment	440,816	gsf	10.00	4,408,160		
SUBTOTAL						25,476,504

**D5020 LIGHTING & POWER**

Lighting, Controls + Power	440,816	gsf	18.00	7,934,688		
SUBTOTAL						7,934,688

**D5030 COMMUNICATION & SECURITY SYSTEMS**

Telecommunications/PA + Clock	440,816	gsf	4.00	1,763,264		
<u>Performance lighting</u>						
Theater AV	1	ls	200,000.00	200,000		
Stage lighting fixture package	1	ls	250,000.00	250,000		
Audio Visual Systems	440,816	gsf	9.50	4,187,752		
Classroom speech + AV	225	rms	5,000.00	1,125,000		
<u>Specialty Communications Systems</u>						
BDA system, antenna and annunciator	440,816	sf	0.65	286,530		
Cell repeater/Distributed antenna system, not specified	440,816	sf	1.00	440,816		
Emergency 2 way communication system at elevator lobbies +stairs	1	ls	100,000.00	100,000		
<u>Fire Alarm</u>	440,816	gsf	4.00	1,763,264		
<u>Security System</u>	440,816	gsf	10.00	4,408,160		
SUBTOTAL						14,524,786

**D5040 OTHER ELECTRICAL SYSTEMS**

Common Work Results for Electrical

Lightning prevention	440,816	gsf	0.30	132,245		
Grounding	440,816	gsf	0.40	176,326		
Misc. demolition work	440,816	gsf	0.25	110,204		



PSR Options Cost Estimate

GFA

440,816

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**BUILDING BACKUP - OPTION C.5b**

Temp power and lights	440,816	gsf	1.20	528,979		
Seismic restraints/Coordination/misc.	440,816	gsf	3.00	1,322,448		
SUBTOTAL						2,270,202

<b>TOTAL - ELECTRICAL</b>	<b>\$50,206,180</b>
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**E10 EQUIPMENT**

**E10 EQUIPMENT, GENERALLY**

**112000 LOADING DOCK EQUIPMENT**

Loading dock leveler(2), truck restraints (2) and bumpers	1	ls	50,000.00	50,000		
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**110620 THEATRICAL EQUIPMENT**

*Allowance per Architect*

Stage lighting and fixtures - equipment only	1	ls	358,000.00	358,000		
Stage rigging, installed	1	ls	275,000.00	275,000		
Stage curtains, installed	1	ls	88,385.00	88,385		
Forestage Platforms, installed	1	ls	100,000.00	100,000		
Orchestra Enclosure, installed	1	ls	175,000.00	175,000		
Orchestra Pit Lift	1	ls	150,000.00	150,000		
Auditorium AV Equipment					See Electrical	

**113100 APPLIANCES**

Residential appliances - allowance	1	ls	60,000.00	60,000		
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**114000 FOOD SERVICE EQUIPMENT**

Kitchen equipment	1	ls	2,500,000.00	2,500,000		
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**115300 EDUCATIONAL EQUIPMENT**

Science equipment;	1	ls	400,000.00	400,000		
Kiln	1	ea	5,000.00	5,000		
Allowance for miscellaneous equipment	1	ls	50,000	50,000		

**116600 GYM EQUIPMENT**

Gym Equipment	1	ls	500,000.00	500,000		
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**126000 SEATING**

Auditorium seating	1,000	seat	400.00	400,000		
SUBTOTAL						5,111,385

<b>TOTAL - EQUIPMENT</b>	<b>\$5,111,385</b>
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**E20 FURNISHINGS**

**E2010 FIXED FURNISHINGS**

**122100 WINDOW TREATMENT**

Window shades at exterior glazing including blackout shades at art & science classrooms - allowance	40,676	sf	10.00	406,760		
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**123553 CASEWORK**

Casework package	440,816	gsf	12.00	5,289,792		
SUBTOTAL						5,696,552

**E2020 MOVABLE FURNISHINGS**

All movable furnishings to be provided and installed by owner

SUBTOTAL						NIC
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<b>TOTAL - FURNISHINGS</b>	<b>\$5,696,552</b>
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**F10 SPECIAL CONSTRUCTION**

**F10 SPECIAL CONSTRUCTION**

Pre-engineered Greenhouse	1	ls	150,000.00	150,000		
SUBTOTAL						150,000

<b>TOTAL - SPECIAL CONSTRUCTION</b>	<b>\$150,000</b>
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PSR Options Cost Estimate

GFA

440,816

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION C.5b

**F20** SELECTIVE BUILDING DEMOLITION

**F2010** BUILDING ELEMENTS DEMOLITION

No items in this section

SUBTOTAL

**F2020** HAZARDOUS COMPONENTS ABATEMENT

See main summary for HazMat allowance

See Summary

SUBTOTAL

**TOTAL - SELECTIVE BUILDING DEMOLITION**

SUBTOTAL

**\$275,694,472**



Lexington High School  
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PSR Options Cost Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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SITEWORK C.5.b

<b>G</b>	<b>SITEWORK</b>						
<b>G10</b>	<b>SITE PREPARATION &amp; DEMOLITION</b>	<b>2,015,000</b>	<b>sf</b>				
<b>311000</b>	<b>GENERAL CONDITIONS</b>						
	Mobilizations/Temp Parking/Etc.	<b>1</b>	ls	500,000.00	500,000		
	6' high site construction fence - perimeter	<b>7,500</b>	lf	18.00	135,000		
<b>311000</b>	<b>SITE DEMOLITION AND RELOCATIONS</b>						
	Demolish existing site conditions	<b>1</b>	ls	900,000.00	900,000		
<b>311000</b>	<b>UTILITY DEMOLITION</b>						
	Demolish existing utility lines	<b>1</b>	ls	250,000.00	250,000		
	Utility Support/Ground Improvements	<b>1</b>	ls	1,500,000.00	1,500,000		
<b>311000</b>	<b>VEGETATION &amp; TOPSOIL MANAGEMENT</b>						
	Strip + dispose topsoil (swell 25%)	<b>23,264</b>	cy	37.00	860,768		
	Street sweeping allowance during hauling	<b>1</b>	ls	50,000.00	50,000		
<b>311000</b>	<b>CLEAR GRASSY KNOLL</b>						
	Remove trees/vegetation	<b>1</b>	ls	10,000.00	10,000		
	Strip + dispose topsoil	<b>1,600</b>	cy	37.00	59,200		
	Rock removal; mechanical	<b>1,600</b>	cy	85.00	136,000		
<b>312000</b>	<b>EROSION &amp; SEDIMENT CONTROL</b>						
	Silt Fence; installation and removal	<b>7,500</b>	lf	12.00	90,000		
	Erosion Control monitoring & maintenance	<b>1</b>	ls	80,000.00	80,000		
<b>312000</b>	<b>SITE EARTHWORK</b>						
	<u>Site cut to design subgrade</u>	<b>0</b>	cy				
	Cut	<b>0</b>	cy	20.00			
	Store cut onsite					NR	
	Process cut and amend with additional soils for reuse					NR	
	Imported fill	<b>64,000</b>	cy	40.00	2,560,000		
<b>312000</b>	<b>SOIL DISPOSAL - conversion factor 1.7 to tons</b>						
	Load excess soils for disposal						
	Less than RCS-1 - clean non-regulated	<b>1</b>	ls			NR	
<b>312000</b>	<b>ESTABLISHING GRADE</b>						
	Sub grade establishment	<b>2,015,000</b>	sf	0.15	302,250		
	Fine grading throughout the site	<b>2,015,000</b>	sf	0.25	503,750		
	General rock removal	<b>3,400</b>	cy	85.00	289,000		
<b>312000</b>	<b>HAZARDOUS MATERIALS</b>						
	UST removal allowance					NR	
	Soil disposal & replacement allowance					See Summary	
	SUBTOTAL						8,225,968
<b>G20</b>	<b>SITE IMPROVEMENTS</b>						
	<b>Roadways and Parking Lots</b>						
	<u>Bituminous concrete pavement - standard</u>	<b>300,800</b>	<b>sf</b>				
	gravel base; 8" thick	<b>23,256</b>	cy	50.00	1,162,800		
	asphalt top; 1.5" thick	<b>2,876</b>	tns	200.00	575,200		
	asphalt binder; 2" thick	<b>3,842</b>	tns	190.00	729,980		
	<u>Porous Pavement</u>	<b>75,200</b>	<b>sf</b>				
	Choker course; 4" thick crushed stone	<b>1,184</b>	cy	75.00	88,800		
	Filter course; 8" thick gravel	<b>2,333</b>	cy	65.00	151,645		
	Reservoir course; 8" thick crushed stone	<b>2,333</b>	cy	55.00	128,315		
	Porous pavement; 4" thick	<b>1,898</b>	tns	400.00	759,200		
	Geotextiles to paving	<b>376,000</b>	sf	1.50	564,000		
<b>320000</b>	<b>CURBING</b>						
	Vertical granite curb	<b>18,900</b>	lf	55.00	1,039,500		

PSR Options Cost Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>SITEWORK C.5.b</b>							
320000	<b>ROAD MARKINGS AND SIGNS</b>						
	Parking spot	500	ea	85.00	42,500		
	Parking spot ADA premium	45	ea	250.00	11,250		
	Pavement markings/signage allowance	1	ls	100,000.00	100,000		
	SUBTOTAL					5,353,190	
320000	<b>PEDESTRIAN PAVING</b>						
	<u>Concrete sidewalks</u>	115,000	sf				
	gravel base; 12" thick	5,324	cy	50.00	266,200		
	Broom finish concrete paving; 5" thick	115,000	sf	16.00	1,840,000		
	<u>Concrete pads</u>	1,500	sf				
	gravel base; 12" thick	104	cy	50.00	5,200		
	Broom finish concrete paving; 8" thick	1,500	sf	24.00	36,000		
	<u>Porous concrete pavers; 20% of Plaza</u>	15,600	sf				
	Open graded stone subbase AASHTO #2; 32" thick	1,928	cy	50.00	96,400		
	Open graded base AASHTO #57; 6" thick	361	cy	50.00	18,050		
	Open graded bedding course AASHTO #8; 2" thick	121	cy	65.00	7,865		
	Pavers	15,600	sf	28.00	436,800		
	Geotextiles on top, bottom and sides of subbase	3,467	sy	3.00	10,401		
	<u>Concrete paving; 80% of Plaza</u>	62,400	sf				
	gravel base; 12" thick	2,889	cy	50.00	144,450		
	Broom finish concrete paving; 5" thick	62,400	sf	18.00	1,123,200		
320000	<b>STAIRS AND RAMPS</b>						
	Ramp/stairs premium	1	ls	250,000.00	250,000		
	SUBTOTAL					4,234,566	
320000	<b>SITE IMPROVEMENTS</b>						
320000	<b>SITE FURNISHINGS</b>						
	Bollards/bike racks/benches/flag poles etc.	1	ls	1,000,000.00	1,000,000		
	New restroom/tickets/concessions building	1,000	sf	700.00	700,000		
320000	<b>EXISTING STADIUM + TRACK ETR</b>					No Costs Assumed	
	Grass fields; sod	360,000	sf				
	Varsity Baseball Diamond; C1	100,000	sf	6.00	600,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	60,000.00	60,000		
	Varsity Softball Diamond; C2	55,000	sf	6.00	330,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	30,000.00	30,000		
	Junior Varsity Baseball Diamond; C3 + Cricket	60,000	sf	6.00	360,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	50,000.00	50,000		
	Little League Diamond; C4	40,000	sf	6.00	240,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	30,000.00	30,000		
	Crumb football field; C5	60,000	sf	6.00	360,000		
	Worthen practice field; C6	45,000	sf	6.00	270,000		
	Tennis courts + Basketball courts					ETR	
320000	<b>ATHLETIC EQUIPMENT</b>						
	Equipment allowance	1	ls	180,000.00	180,000		
320000	<b>BLEACHERS AND SCOREBOARDS</b>						

PSR Options Cost Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>SITEWORK C.5.b</b>							
	Bleachers + pressbox	1,000	seat	900.00	900,000		
	Electronic scoreboard; wireless controls, multiboard	1	ea	75,000.00	75,000		
	Electronic scoreboard; softball	1	ea	45,000.00	45,000		
320000	FENCING						
	Fencing allowance	1	ls	500,000.00	500,000		
	SUBTOTAL					6,090,000	
320000	SITE WALLS						
	Retaining walls/site walls/seat walls	1	ls	750,000.00	750,000		
	SUBTOTAL					750,000	
	<b>Landscaping</b>						
329900	LAWN AND SEED						
	Topsoil - imported 12" thick; swell 25%	15,741	cy	65.00	1,023,165		
	General Seeding	850,000	sf	0.50	425,000		
	Trees, Shrubs and Perennial planting area	1	ls	1,500,000.00	1,500,000		
	Courtyard	1	ls	150,000.00	150,000		
	IRRIGATION						
	Irrigation area	360,000	sf	2.00	720,000		
	Wetlands reconstruction					NR	
	SUBTOTAL					3,818,165	
<b>G30</b>	<b>CIVIL MECHANICAL UTILITIES</b>						
210000	FIRE PROTECTION						
	12" CLDI	4,000	lf	150.00	600,000		
	8" CLDI	200	lf	100.00	20,000		
	6" CLDI	100	lf	95.00	9,500		
	Fire department connection	1	ea	2,500.00	2,500		
	Gate valve; hydrants	1	ls	60,000.00	60,000		
331000	CONNECTIONS						
	Connect to existing water line; 12" live tap	2	ea	15,000.00	30,000		
312000	EXCAVATION & BACKFILL						
	DI piping excavation/backfill (inside site)	4,300	lf	50.00	215,000		
	Pressure test & chlorinate	4,300	lf	7.50	32,250		
	Allowance for temporary water service	1	ea	25,000.00	25,000		
	Allowance for temporary support of existing utilities					NR	
	SUBTOTAL					994,250	
333000	SANITARY SEWER						
	PVC sewer pipe	2,964	lf	60.00	177,840		
	Sewer manholes	7	ea	6,000.00	42,000		
	Connection to existing	2	loc	15,000.00	30,000		
	Grease trap - 6,000 gal.	2	ea	35,000.00	70,000		
	SUBTOTAL					319,840	
334000	STORM DRAINAGE						
	Infiltration systems	11,500	sf	45.00	517,500		
	Hydrodynamic separators	6	ea	20,000.00	120,000		
	Storm systems; complete at parking; piping; CB + MH etc.	300,800	sf	10.00	3,008,000		
	<u>Sodded Athletic fields</u>						
	Drainage at field	360,000	sf	1.00	Included w/fields		
	SUBTOTAL					3,645,500	
<b>G40</b>	<b>ELECTRICAL UTILITIES</b>						
	Concrete:						
	Primary duct bank 6-5" duct bank	900	lf	50.00	45,000		
	Secondary service 4000A - two services	200	lf	50.00	10,000		
	Generator duct bank	100	lf	40.00	4,000		
	PV 5000A secondary service (10) - 4"C	100	lf	60.00	6,000		
	Communications duct bank 6-4"	750	lf	40.00	30,000		



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PSR Options Cost Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>SITEWORK C.5.b</b>							
	Transformer/generator pad	6	ea	3,000.00	18,000		
	Site lighting pole bases	56	ea	500.00	28,000		
	Excavation and backfill:						
	Primary duct bank 2-5" duct bank	900	lf	25.00	22,500		
	Secondary service 4000A	200	lf	30.00	6,000		
	Storage building 400A service	40	lf	22.00	880		
	Generator duct bank	100	lf	30.00	3,000		
	PV 5000A secondary service (10) - 4"C	100	lf	45.00	4,500		
	EV conduits				See Below		
	Communications duct bank 4-4"	750	lf	25.00	18,750		
	Site lighting circuitry	5,200	lf	6.00	31,200		
	2-2" PVC to sports field lighting	1,200	lf	10.00	12,000		
	CCTV circuitry	1,200	lf	6.00	7,200		
	Scoreboard power & data, misc. sports field power, allow	1,000	lf	6.00	6,000		
	SUBTOTAL					253,030	
	<u>Power</u>						
	<b>Site electrical 15 kVOLT- Transformers etc.</b>	1	ls	2,500,000.00	By Owner		
	Utility co. back charges				Included above		
	Primary duct bank	900	lf	180.00	162,000		
	Electric manhole	6	ea	12,500.00	75,000		
	Transformers + 15kVolt switchgear by Owner				Included above		
	Secondary service 4000A	200	lf	1,400.00	280,000		
	Generator:						
	Generator service	100	lf	400.00	40,000		
	PV:						
	PV 5000A secondary service (10) - 4"C	400	lf	600.00	240,000		
	<u>Communications</u>						
	Connect to existing utility pole	1	ea	1,500.00	1,500		
	Communications duct bank	750	lf	150.00	112,500		
	Communication manhole	2	ea	12,500.00	25,000		
	<u>Site Lighting</u>						
	Allowance	360,000	sf	2.00	720,000		
	<u>EV Stations</u>						
	EV stations; single	20	loc	15,000.00	300,000		
	EV stations; EV ready; conduit only	75	loc	4,000.00	300,000		
	EV stations; EV ready; conduit + wiring	50	loc	7,000.00	350,000		
	<u>Sports Fields</u>						
	Sports field lighting, allow 1 baseball field; 1 softball field + rectangle field	2	loc	460,000.00	920,000		
	Fixture MUSCO				Included above		
	Sports field lighting circuitry	1,200	lf	12.00	Included above		
	Scoreboard power & data, misc. sports field power, allow	1	ls	10,000.00	Included above		
	Rough-in, allow	1	ls	35,000.00	Included above		
	<u>Site Demolition</u>						
	Site demolition work				Included w/ building		
	SUBTOTAL					3,526,000	
<b>TOTAL - SITE DEVELOPMENT</b>							<b>\$37,210,509</b>



Lexington High School  
Town of Lexington, MA

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PSR Options Cost Estimate

GFA 440,816

## CONSTRUCTION COST SUMMARY

BUILDING SYSTEM		SUB-TOTAL	TOTAL	\$/SF	%
<b>BUILDING SUMMARY - OPTION D.2</b>					
<b>A10</b>	<b>FOUNDATIONS</b>				
A1010	Standard Foundations	\$4,153,071			
A1020	Special Foundations	\$5,474,035			
A1030	Lowest Floor Construction	\$5,068,730	<b>\$14,695,836</b>	\$33.34	5.4%
<b>A20</b>	<b>BASEMENT CONSTRUCTION</b>				
A2010	Basement Excavation	\$0			
A2020	Basement Walls	\$0	<b>\$0</b>	\$0.00	0.0%
<b>B10</b>	<b>SUPERSTRUCTURE</b>				
B1010	Upper Floor Construction	\$17,954,546			
B1020	Roof Construction	\$8,581,812	<b>\$26,536,358</b>	\$60.20	9.7%
<b>B20</b>	<b>EXTERIOR CLOSURE</b>				
B2010	Exterior Walls	\$18,742,750			
B2020	Windows	\$8,346,536			
B2030	Exterior Doors	\$440,816	<b>\$27,530,102</b>	\$62.45	10.1%
<b>B30</b>	<b>ROOFING</b>				
B3010	Roof Coverings	\$6,798,499			
B3020	Roof Openings	\$54,000	<b>\$6,852,499</b>	\$15.55	2.5%
<b>C10</b>	<b>INTERIOR CONSTRUCTION</b>				
C1010	Partitions	\$19,786,516			
C1020	Interior Doors	\$5,399,528			
C1030	Specialties/Millwork	\$6,680,093	<b>\$31,866,137</b>	\$72.29	11.7%
<b>C20</b>	<b>STAIRCASES</b>				
C2010	Stair Construction	\$1,382,250			
C2020	Stair Finishes	\$420,000	<b>\$1,802,250</b>	\$4.09	0.7%
<b>C30</b>	<b>INTERIOR FINISHES</b>				
C3010	Wall Finishes	\$7,493,872			
C3020	Floor Finishes	\$6,612,240			
C3030	Ceiling Finishes	\$6,612,240	<b>\$20,718,352</b>	\$47.00	7.6%
<b>D10</b>	<b>CONVEYING SYSTEMS</b>				
D1010	Elevator	\$1,207,200	<b>\$1,207,200</b>	\$2.74	0.4%



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## CONSTRUCTION COST SUMMARY

BUILDING SYSTEM	SUB-TOTAL	TOTAL	\$/SF	%
<b>BUILDING SUMMARY - OPTION D.2</b>				
<b>D20 PLUMBING</b>				
D20 Plumbing	\$13,342,848	<b>\$13,342,848</b>	\$30.27	4.9%
<b>D30 HVAC</b>				
D30 HVAC	\$62,423,440	<b>\$62,423,440</b>	\$141.61	22.9%
<b>D40 FIRE PROTECTION</b>				
D40 Fire Protection	\$4,117,344	<b>\$4,117,344</b>	\$9.34	1.5%
<b>D50 ELECTRICAL</b>				
D5010 Complete System	\$50,679,456	<b>\$50,679,456</b>	\$114.97	18.6%
<b>E10 EQUIPMENT</b>				
E10 Equipment	\$5,111,385	<b>\$5,111,385</b>	\$11.60	1.9%
<b>E20 FURNISHINGS</b>				
E2010 Fixed Furnishings	\$5,672,472			
E2020 Movable Furnishings	NIC	<b>\$5,672,472</b>	\$12.87	2.1%
<b>F10 SPECIAL CONSTRUCTION</b>				
F10 Special Construction	\$150,000	<b>\$150,000</b>	\$0.34	0.1%
<b>F20 HAZMAT REMOVALS</b>				
F2010 Building Elements Demolition	\$0			
F2020 Hazardous Components Abatement	\$0	<b>\$0</b>	\$0.00	0.0%

<b>TOTAL DIRECT COST (Trade Costs)</b>	<b>\$272,705,679</b>	<b>\$618.64</b>	<b>100.0%</b>
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PSR Options Cost Estimate

GFA

440,816

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**BUILDING BACKUP - OPTION D.2**

**GROSS FLOOR AREA CALCULATION**

Level 1	156,401
Level 2	100,000
Level 3	92,000
Level 4	92,415

**TOTAL GROSS FLOOR AREA (GFA)**

**440,816 sf**

**A10 FOUNDATIONS**

**A1010 STANDARD FOUNDATIONS**

Strip Footings: 1 x 3

Formwork	5,510	sf	15.00	82,650
Re-bar	36,366	lbs.	2.50	90,915
Concrete material	321	cy	160.00	51,360
Placing concrete	321	cy	120.00	38,520

Perimeter foundation walls: 20" Thick x 3.5 ft H

Formwork	19,285	sf	21.00	404,985
Re-bar	48,213	lbs.	2.50	120,533
Concrete material	626	cy	160.00	100,160
Placing concrete	626	cy	120.00	75,120
Form shelf	2,755	lf	8.00	22,040

Spread Footings: 9 x 9 x 2 (Three Story)

Formwork	11,592	sf	18.00	208,656
Re-bar	78,246	lbs.	2.50	195,615
Concrete material	1,014	cy	160.00	162,240
Placing concrete	1,014	cy	120.00	121,680
Set anchor bolts grout plates	161	ea	250.00	40,250

Spread Footings: 10 x 10 x 2 (Four Story)

Formwork	18,400	sf	18.00	331,200
Re-bar	138,000	lbs.	2.50	345,000
Concrete material	1,789	cy	160.00	286,240
Placing concrete	1,789	cy	120.00	214,680
Set anchor bolts grout plates	230	ea	250.00	57,500

Piers

Formwork	4,692	sf	24.00	112,608
Re-bar	52,785	lbs.	2.50	131,963
Concrete material	182	cy	160.00	29,120
Placing concrete	182	cy	160.00	29,120
Housekeeping pads	1	ls	30,000.00	30,000

070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Dampproofing @ foundation wall	11,020	sf	4.00	44,080
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072100 THERMAL INSULATION

Rigid insulation to face of foundation wall; 4" R-20	11,020	sf	5.00	55,100
Brick Shelf 4" insulation	2,755	lf	20.00	55,100

312000 EARTHWORK

Strip footings

Excavation	3,061	cy	14.00	42,854
Reuse excess material on site	947	cy	15.00	14,205
Backfill with select fill	2,114	cy	25.00	52,850

Spread footings

Excavation	7,793	cy	14.00	109,102
Reuse excess material on site	2,985	cy	15.00	44,775
Backfill with select fill	4,808	cy	25.00	120,200

Miscellaneous

Foundation drain	2,755	lf	30.00	82,650
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GFA

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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**BUILDING BACKUP - OPTION D.2**

Temporary dewatering for foundation work  
SUBTOTAL

1 ls 250,000.00 250,000  
4,153,071

**A1020 SPECIAL FOUNDATIONS**

Rigid inclusions  
SUBTOTAL

156,401 sf 35.00 5,474,035  
5,474,035

**A1030 LOWEST FLOOR CONSTRUCTION**

**033000 CONCRETE**

Vapor barrier, 15mils  
Slab on grade  
WWF reinforcement  
Concrete - 5" thick  
Placing concrete  
Finishing and curing concrete  
Control joints - saw cut

156,401 sf 1.25 195,501  
156,401 sf  
179,861 sf 1.85 332,743  
2,494 cy 170.00 423,980  
2,494 cy 65.00 162,110  
156,401 sf 3.00 469,203  
156,401 sf 0.10 15,640

Miscellaneous

Equipment pads  
Loading dock  
Elevator pits  
Radon system

1 ls 30,000.00 30,000  
1 ls 50,000.00 50,000  
3 ea 40,000.00 120,000  
Excluded; NR

**072100 THERMAL INSULATION**

Perimeter insulation, 4" thick R-20 - 6ft at perimeter  
Under slab insulation, 2" thick under slab

16,530 sf 5.00 82,650  
139,871 sf 3.00 419,613

**312000 EARTHWORK**

Gravel base, 12"  
Structural fill  
Allowance for underslab drainage  
Compact existing sub-grade  
Underslab E&B for plumbing  
SUBTOTAL

5,793 cy 45.00 260,685  
34,200 cy 55.00 1,881,000  
156,401 sf 2.00 312,802  
156,401 sf 0.50 78,201  
156,401 sf 1.50 234,602

5,068,730

**TOTAL - FOUNDATIONS**

**\$14,695,836**

**A20 BASEMENT CONSTRUCTION**

**A2010 BASEMENT EXCAVATION**

No Work in this section  
SUBTOTAL

-

**A2020 BASEMENT WALLS**

No Work in this section  
SUBTOTAL

-

**TOTAL - BASEMENT CONSTRUCTION**

**B10 SUPERSTRUCTURE**

**B1010 FLOOR CONSTRUCTION**

14.7 lbs/sf  
3,230 tns including canopies + roof screens  
\$6,552 \$/Ton

**033000 CONCRETE**

WWF reinforcement  
Concrete Fill to metal deck; lightweight, total thickness 6 1/4"  
Place and finish concrete  
Rebar to decks

327,077 sf 1.85 605,092  
5,752 cy 190.00 1,092,880  
284,415 sf 3.00 853,245  
85,325 lbs 2.00 170,650

**051200 STRUCTURAL STEEL FRAMING**

Structural steel framing; Complete; 15 lbs per SF  
Steel premium for lateral system due to poor soils; 1 PSF  
Moment connections  
Shear studs  
3" metal galvanized floor deck

2,133 tns 5,000.00 10,665,000  
142 tns 5,000.00 710,000  
107 ea 750.00 80,250  
71,104 ea 3.50 248,864  
284,415 sf 8.00 2,275,320



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**BUILDING BACKUP - OPTION D.2**

	Expansion joints	1	ls	100,000.00	100,000		
078100	<b>FIREPROOFING/FIRESTOPPING</b>						
	Fire proofing to columns and beams; 2 hr	284,415	sf	3.00	853,245		
	Intumescent paint @ architecturally exposed beams and columns - allow	1	ls	300,000.00	300,000		
	<b>SUBTOTAL</b>					17,954,546	

**B1020 ROOF CONSTRUCTION**

033000	<b>CONCRETE</b>						
	6" Normal weight concrete deck at low roof and at mechanical equipment pads	35,000	sf	9.00	315,000		
051200	<b>STRUCTURAL STEEL FRAMING</b>						
	Structural steel framing; Complete; 13 lbs per SF	1,017	tns	5,000.00	5,085,000		
	Structural steel framing; 2 lbs per SF premium at RTU's	35	tns	5,000.00	175,000		
	Steel premium for lateral system due to poor soils; 1 PSF	78	tns	5,000.00	390,000		
	Roof screens	80	tns	5,500.00	440,000		
	<u>Decking</u>						
	1 1/2" galvanized metal deck, typical	156,401	sf	7.00	1,094,807		
078100	<b>FIREPROOFING/FIRESTOPPING</b>						
	Fireproofing to columns, beams and deck; 1 hr - includes Intumescent	156,401	sf	5.00	782,005		
	Intumescent paint @ architecturally exposed beams and columns - allow	1	ls	300,000.00	300,000		
	<b>SUBTOTAL</b>					8,581,812	

<b>TOTAL - SUPERSTRUCTURE</b>						<b>\$26,536,358</b>	
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**B20 EXTERIOR CLOSURE**

**B2010 EXTERIOR WALLS**  
**Exterior Wall Area**

153,072 Total closure area  
114,804 sf total area solid

042000	<b>MASONRY</b>						
	Mockup	1	ls	100,000.00	100,000		
	Brick veneer; 60% of Solid	68,882	sf	44.00	3,030,808		
	Granite veneer base; 2%	2,296	sf	120.00	275,520		
	Precast trim allowance	1	ls	1,200,000.00	1,200,000		
	4" CMU wall at auditorium	9,000	sf	30.00	270,000		
	8" Mineral wool at exterior closure (2 layers 4")	114,804	sf	7.50	861,030		
	Miscellaneous flashings and sealants	114,804	sf	1.50	172,206		
	Staging to exterior wall	114,804	sf	4.00	459,216		
055000	<b>MISC. METALS</b>						
	Misc. metals at masonry including loose lintels (relieving angles included in steel tns)	68,882	sf	1.50	103,323		
070001	<b>WATERPROOFING, DAMPPROOFING AND CAULKING</b>						
	Air barrier	114,804	sf	10.00	1,148,040		
	Miscellaneous sealants to closure	114,804	sf	1.00	114,804		
072100	<b>THERMAL INSULATION</b>						
	4" cellulose insulation in stud	114,804	sf	3.25	373,113		
	Insulation at glazed openings	12,756	lf	6.00	76,536		
076400	<b>CLADDING</b>						
	Composite metal panel, Alucobond or equal; 18%	20,665	sf	100.00	2,066,500		
	Terracotta; 20%	22,961	sf	160.00	3,673,760		
	Canopies; soffit + framing	4,000	sf	100.00	400,000		
	12' high Acoustic Equipment Screen	16,000	sf	95.00	1,520,000		

**EXPANSION JOINT COVERS**



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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>BUILDING BACKUP - OPTION D.2</b>							
	Thermal breaks	1	ls	50,000.00	50,000		
	Expansion joints	1	ls	100,000.00	100,000		
092900	GYPSUM BOARD ASSEMBLIES						
	Exterior wall;						
	6" Stud backup	114,804	sf	16.00	1,836,864		
	Gypsum Sheathing	114,804	sf	3.50	401,814		
	Drywall lining to interior face of stud backup	114,804	sf	4.00	459,216		
	Passive house premium					NR	
101400	SIGNAGE						
	Exterior signage - allowance	1	ls	50,000.00	50,000		
	SUBTOTAL					18,742,750	
<b>B2020</b>	<b>WINDOWS</b>						
	Exterior Wall Area	38,268	sf				
061000	ROUGH CARPENTRY						
	Wood blocking at openings	12,756	lf	10.00	127,560		
070001	WATERPROOFING, DAMPPROOFING AND CAULKING						
	Air barrier/flashings at windows	12,756	lf	10.00	127,560		
	Backer rod & double sealant	12,756	lf	11.00	140,316		
080001	METAL WINDOWS						
	Aluminum windows, triple glazed including interior and exterior trim per details	19,134	sf	175.00	3,348,450		
	Curtainwall, triple glazed including allowance for interior and exterior trim details	19,134	sf	225.00	4,305,150		
	Horizontal aluminum fin sunshades @ 40% of windows, custom color	1,700	lf	175.00	297,500		
	Passive house premium					NR	
089000	LOUVERS						
	Louvers					N/A	
	SUBTOTAL					8,346,536	
<b>B2030</b>	<b>EXTERIOR DOORS</b>						
	Allowance for exterior doors	440,816	gsf	1.00	440,816		
	SUBTOTAL					440,816	
<b>TOTAL - EXTERIOR CLOSURE</b>							<b>\$27,530,102</b>

**B30 ROOFING**

055000	MISCELLANEOUS METALS						
	Terrace top rail/ladders/stairs	1	ls	80,000.00	80,000		
061000	ROUGH CARPENTRY						
	Rough carpentry and blocking @ roof	156,401	sf	1.50	234,602		
070002	ROOFING AND FLASHING	156,401	total area				
	PVC roof membrane system, white or gray, 1/2" coverboard, 10" polyiso insulation, vapor barrier	156,401	sf	33.00	5,161,233		
	Canopy roofing	4,000	sf	28.00	112,000		
	Plaza deck pavers system at terrace	8,358	sf	70.00	585,060		
	Miscellaneous Roofing						
	Miscellaneous flashings/copings/walkway pads etc.	156,401	sf	4.00	625,604		
	SUBTOTAL					6,798,499	
<b>B3020</b>	<b>ROOF OPENINGS</b>						
086300	ROOF SKYLIGHTS						



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**BUILDING BACKUP - OPTION D.2**

Aluminum framed skylight (4loc)					None Assumed		
Smoke vents; 7'x7'	3	ea	18,000.00	54,000			
SUBTOTAL						54,000	

<b>TOTAL - ROOFING</b>	<b>\$6,852,499</b>
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**C10 INTERIOR CONSTRUCTION**

**C1010 PARTITIONS**

040001	MASONRY						
	Allowance for masonry partitions	440,816	gsf	6.00	2,644,896		
061000	ROUGH CARPENTRY						
	Backer panels in electrical closets	1	ls	10,000.00	10,000		
	Wood blocking at interiors	440,816	gsf	0.50	220,408		
078400	FIREPROOFING/FIRESTOPPING						
	Fire stopping including slab edges and core	440,816	gsf	1.00	440,816		
070001	WATERPROOFING, DAMPPROOFING AND CAULKING						
	Miscellaneous sealants throughout building	440,816	gsf	1.25	551,020		
078150	EXPANSION JOINTS						
	Allowance for expansion joint covers	1	ls	50,000.00	50,000		
081110	INTERIOR GLAZING						
	Allowance for interior glazing	440,816	gsf	3.00	1,322,448		
092900	GYPSUM BOARD ASSEMBLIES						
	Allowance for GWB partitions	440,816	gsf	33.00	14,546,928		
	SUBTOTAL					19,786,516	

**C1020 INTERIOR DOORS**

	Doors, frames, hardware; complete	440,816	gsf	8.00	3,526,528		
	Fire shutters	1	ls	150,000.00	150,000		
	Security doors	16	loc	25,000.00	400,000		
	Premium for electronic hardware	882	set	1,500.00	1,323,000		
	SUBTOTAL					5,399,528	

**C1030 SPECIALTIES / MILLWORK**

055000	MISCELLANEOUS METALS						
	Miscellaneous metals throughout building	440,816	gsf	5.00	2,204,080		
061000	ROUGH CARPENTRY						
062000	INTERIOR ARCHITECTURAL WOODWORK						
	Interior millwork package	440,816	gsf	3.00	1,322,448		
101100	VISUAL DISPLAY SURFACES						
	Markerboard and tackboard package	440,816	gsf	2.00	881,632		
101400	SIGNAGE						
	Room identification, directional & safety signage, building directory + environmental graphics	440,816	gsf	2.00	881,632		
102800	TOILET ACCESSORIES						
	Toilet accessories/compartments	440,816	gsf	1.00	440,816		
104400	FIRE PROTECTION SPECIALTIES						
	Fire extinguisher cabinets	1	ls	65,852.71	65,853		
	AED cabinets	1	ls	2,000.00	2,000		
105000	LOCKERS						
	Student lockers	440,816	gsf	2.00	881,632		



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**BUILDING BACKUP - OPTION D.2**

SUBTOTAL

6,680,093

**TOTAL - INTERIOR CONSTRUCTION**

**\$31,866,137**

**C20 STAIRCASES**

**C2010 STAIR CONSTRUCTION**

033000 CONCRETE

Concrete to stairs

21

flt

5,000.00

105,000

055000 MISCELLANEOUS METALS

Egress stairs w/ stainless steel rails and handrails

18

flt

50,000.00

900,000

Projection room stair, 4' wide

1

flt

40,000.00

40,000

Learning stair

Stainless steel guardrail

65

lf

425.00

27,625

Stainless steel handrail

55

lf

175.00

9,625

Adjacent stairs; 5'-3" wide

2

flt

75,000.00

150,000

Learning stair framing

Framing at learning stair - premium

1

ls

150,000.00

150,000

SUBTOTAL

1,382,250

**C2020 STAIR FINISHES**

090005 RESILIENT FLOORS

Stair finishes

21

flts

20,000.00

420,000

SUBTOTAL

420,000

**TOTAL - STAIRCASES**

**\$1,802,250**

**C30 INTERIOR FINISHES**

**C3010 WALL FINISHES**

Wall finishes complete package

440,816

gsf

17.00

7,493,872

SUBTOTAL

7,493,872

**C3020 FLOOR FINISHES**

Floor finishes complete package

440,816

gsf

15.00

6,612,240

SUBTOTAL

6,612,240

**C3030 CEILING FINISHES**

Ceiling finishes complete package

440,816

gsf

15.00

6,612,240

SUBTOTAL

6,612,240

**TOTAL - INTERIOR FINISHES**

**\$20,718,352**

**D10 CONVEYING SYSTEMS**

**D1010 ELEVATOR**

055000 MISCELLANEOUS METALS

Pit ladder and miscellaneous metals

3

ea

900.00

2,700

Sill angles

3

ls

1,500.00

4,500

142100 ELEVATOR

Electric traction elevator, 4 stop, 5,000lbs

3

ea

400,000.00

1,200,000

SUBTOTAL

1,207,200

**TOTAL - CONVEYING SYSTEMS**

**\$1,207,200**

**D20 PLUMBING**

**D20 PLUMBING, GENERALLY**

Air source heat pump water heater (2) 500MBH

1

ls

1,000,000.00

1,000,000

Plumbing package complete

440,816

gsf

28.00

12,342,848

SUBTOTAL

13,342,848



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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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BUILDING BACKUP - OPTION D.2

<b>TOTAL - PLUMBING</b>	<b>\$13,342,848</b>
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**D30 HVAC**

**D30 HVAC, GENERALLY**

Geothermal Wells 800' well	350	wells	65,000.00	22,750,000	
HVAC System; Water Source Heat Pump	440,816	gsf	90.00	39,673,440	
SUBTOTAL					62,423,440

<b>TOTAL - HVAC</b>	<b>\$62,423,440</b>
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**D40 FIRE PROTECTION**

**D40 FIRE PROTECTION, GENERALLY**

Fire Equipment

Fire pump with controller 750GPM, incl Jockey pump with controller	1	ea	150,000.00	150,000	
Sprinkler system; complete	440,816	gsf	9.00	3,967,344	
SUBTOTAL					4,117,344

<b>TOTAL - FIRE PROTECTION</b>	<b>\$4,117,344</b>
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**D50 ELECTRICAL**

**D5010 ELECTRICAL SYSTEMS**

**Gear & Distribution**

Normal power distribution system					
4000A 277/480V main switchboard	2	ea	185,000.00	370,000	
Panelboards/feeders	440,816	gsf	8.00	3,526,528	
<u>Emergency power</u>					
Emergency Generator; 1250 kW Diesel	1	ls	812,500.00	812,500	
Emergency power feeders	440,816	gsf	3.00	1,322,448	
<u>Photovoltaic - 3500 kW</u>					
PV system equipment; low roof top	29,609	sf	36.00	1,065,924	
PV system equipment; roof top; High roof (with Structure)	74,022	sf	60.00	4,441,320	
PV system equipment; canopy	91,715	sf	60.00	5,502,900	
Battery Storage	1	ls	2,500,000	2,500,000	
Transparent + opaque vertical cladding BIPV	10,000	sf	200.00	2,000,000	
<u>Equipment Wiring</u>					
Feeders + Electrical to equipment	440,816	gsf	10.00	4,408,160	
SUBTOTAL					25,949,780

**D5020 LIGHTING & POWER**

Lighting, Controls + Power	440,816	gsf	18.00	7,934,688	
SUBTOTAL					7,934,688

**D5030 COMMUNICATION & SECURITY SYSTEMS**

Telecommunications/PA + Clock	440,816	gsf	4.00	1,763,264	
<u>Performance lighting</u>					
Theater AV	1	ls	200,000.00	200,000	
Stage lighting fixture package	1	ls	250,000.00	250,000	
Audio Visual Systems	440,816	gsf	9.50	4,187,752	
Classroom speech + AV	225	rms	5,000.00	1,125,000	
<u>Specialty Communications Systems</u>					
BDA system, antenna and annunciator	440,816	sf	0.65	286,530	
Cell repeater/Distributed antenna system, not specified	440,816	sf	1.00	440,816	
Emergency 2 way communication system at elevator lobbies +stairs	1	ls	100,000.00	100,000	
<u>Fire Alarm</u>	440,816	gsf	4.00	1,763,264	
<u>Security System</u>	440,816	gsf	10.00	4,408,160	
SUBTOTAL					14,524,786

**D5040 OTHER ELECTRICAL SYSTEMS**

Common Work Results for Electrical

Lightning prevention	440,816	gsf	0.30	132,245	
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GFA

440,816

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**BUILDING BACKUP - OPTION D.2**

Grounding	440,816	gsf	0.40	176,326		
Misc. demolition work	440,816	gsf	0.25	110,204		
Temp power and lights	440,816	gsf	1.20	528,979		
Seismic restraints/Coordination/misc.	440,816	gsf	3.00	1,322,448		
SUBTOTAL						2,270,202

<b>TOTAL - ELECTRICAL</b>	<b>\$50,679,456</b>
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**E10 EQUIPMENT**

**E10 EQUIPMENT, GENERALLY**

**112000 LOADING DOCK EQUIPMENT**

Loading dock leveler(2), truck restraints (2) and bumpers	1	ls	50,000.00	50,000		
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**110620 THEATRICAL EQUIPMENT**

*Allowance per Architect*

Stage lighting and fixtures - equipment only	1	ls	358,000.00	358,000		
Stage rigging, installed	1	ls	275,000.00	275,000		
Stage curtains, installed	1	ls	88,385.00	88,385		
Forestage Platforms, installed	1	ls	100,000.00	100,000		
Orchestra Enclosure, installed	1	ls	175,000.00	175,000		
Orchestra Pit Lift	1	ls	150,000.00	150,000		
Auditorium AV Equipment					See Electrical	

**113100 APPLIANCES**

Residential appliances - allowance	1	ls	60,000.00	60,000		
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**114000 FOOD SERVICE EQUIPMENT**

Kitchen equipment	1	ls	2,500,000.00	2,500,000		
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**115300 EDUCATIONAL EQUIPMENT**

Science equipment;	1	ls	400,000.00	400,000		
Kiln	1	ea	5,000.00	5,000		
Allowance for miscellaneous equipment	1	ls	50,000	50,000		

**116600 GYM EQUIPMENT**

Gym Equipment	1	ls	500,000.00	500,000		
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**126000 SEATING**

Auditorium seating	1,000	seat	400.00	400,000		
SUBTOTAL						5,111,385

<b>TOTAL - EQUIPMENT</b>	<b>\$5,111,385</b>
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**E20 FURNISHINGS**

**E2010 FIXED FURNISHINGS**

**122100 WINDOW TREATMENT**

Window shades at exterior glazing including blackout shades at art & science classrooms - allowance	38,268	sf	10.00	382,680		
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**123553 CASEWORK**

Casework package	440,816	gsf	12.00	5,289,792		
SUBTOTAL						5,672,472

**E2020 MOVABLE FURNISHINGS**

All movable furnishings to be provided and installed by owner

SUBTOTAL						NIC
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<b>TOTAL - FURNISHINGS</b>	<b>\$5,672,472</b>
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**F10 SPECIAL CONSTRUCTION**

**F10 SPECIAL CONSTRUCTION**

Pre-engineered Greenhouse	1	ls	150,000.00	150,000		
SUBTOTAL						150,000



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GFA

440,816

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**BUILDING BACKUP - OPTION D.2**

<b>TOTAL - SPECIAL CONSTRUCTION</b>	<b>\$150,000</b>
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**F20 SELECTIVE BUILDING DEMOLITION**

**F2010 BUILDING ELEMENTS DEMOLITION**

No items in this section

SUBTOTAL

**F2020 HAZARDOUS COMPONENTS ABATEMENT**

See main summary for HazMat allowance

See Summary

SUBTOTAL

<b>TOTAL - SELECTIVE BUILDING DEMOLITION</b>
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**SUBTOTAL**

**\$272,705,679**





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SITEWORK D.2

**G SITEWORK**

<b>G10</b>	<b>SITE PREPARATION &amp; DEMOLITION</b>	<b>2,015,000</b>	<b>sf</b>				
<b>311000</b>	<b>GENERAL CONDITIONS</b>						
	Mobilizations/Temp Parking/Etc.	<b>1</b>	ls	500,000.00	500,000		
	6' high site construction fence - perimeter	<b>7,500</b>	lf	18.00	135,000		
<b>311000</b>	<b>SITE DEMOLITION AND RELOCATIONS</b>						
	Demolish existing site conditions	<b>1</b>	ls	900,000.00	900,000		
<b>311000</b>	<b>UTILITY DEMOLITION</b>						
	Demolish existing utility lines	<b>1</b>	ls	250,000.00	250,000		
	Utility Support/Ground Improvements	<b>1</b>	ls	1,500,000.00	1,500,000		
<b>311000</b>	<b>VEGETATION &amp; TOPSOIL MANAGEMENT</b>						
	Strip + dispose topsoil (swell 25%)	<b>23,264</b>	cy	37.00	860,768		
	Street sweeping allowance during hauling	<b>1</b>	ls	50,000.00	50,000		
<b>311000</b>	<b>CLEAR GRASSY KNOLL</b>						
	Remove trees/vegetation	<b>1</b>	ls	10,000.00	10,000		
	Strip + dispose topsoil	<b>1,600</b>	cy	37.00	59,200		
	Rock removal; mechanical	<b>1,600</b>	cy	85.00	136,000		
<b>312000</b>	<b>EROSION &amp; SEDIMENT CONTROL</b>						
	Silt Fence; installation and removal	<b>7,500</b>	lf	12.00	90,000		
	Erosion Control monitoring & maintenance	<b>1</b>	ls	80,000.00	80,000		
<b>312000</b>	<b>SITE EARTHWORK</b>						
	<u>Site cut to design subgrade</u>	<b>0</b>	cy				
	Cut	<b>0</b>	cy	20.00			
	Store cut onsite					NR	
	Process cut and amend with additional soils for reuse					NR	
	Imported fill	<b>4,100</b>	cy	40.00	164,000		
<b>312000</b>	<b>SOIL DISPOSAL - conversion factor 1.7 to tons</b>						
	Load excess soils for disposal						
	Less than RCS-1 - clean non-regulated	<b>1</b>	ls			NR	
<b>312000</b>	<b>ESTABLISHING GRADE</b>						
	Sub grade establishment	<b>2,015,000</b>	sf	0.15	302,250		
	Fine grading throughout the site	<b>2,015,000</b>	sf	0.25	503,750		
	General rock removal	<b>3,400</b>	cy	85.00	289,000		
<b>312000</b>	<b>HAZARDOUS MATERIALS</b>						
	UST removal allowance					NR	
	Soil disposal & replacement allowance					See Summary	
	SUBTOTAL						5,829,968
<b>G20</b>	<b>SITE IMPROVEMENTS</b>						
	<b>Roadways and Parking Lots</b>						
	<u>Bituminous concrete pavement - standard</u>	<b>288,000</b>	<b>sf</b>				
	gravel base; 8" thick	<b>22,267</b>	cy	50.00	1,113,350		
	asphalt top; 1.5" thick	<b>2,753</b>	tns	200.00	550,600		
	asphalt binder; 2" thick	<b>3,678</b>	tns	190.00	698,820		
	<u>Porous Pavement</u>	<b>72,000</b>	<b>sf</b>				
	Choker course; 4" thick crushed stone	<b>1,133</b>	cy	75.00	84,975		
	Filter course; 8" thick gravel	<b>2,233</b>	cy	65.00	145,145		
	Reservoir course; 8" thick crushed stone	<b>2,233</b>	cy	55.00	122,815		
	Porous pavement; 4" thick	<b>1,817</b>	tns	400.00	726,800		
	Geotextiles to paving	<b>360,000</b>	sf	1.50	540,000		
<b>320000</b>	<b>CURBING</b>						
	Vertical granite curb	<b>15,500</b>	lf	55.00	852,500		

PSR Options Cost Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>SITEWORK D.2</b>							
320000	<b>ROAD MARKINGS AND SIGNS</b>						
	Parking spot	500	ea	85.00	42,500		
	Parking spot ADA premium	45	ea	250.00	11,250		
	Pavement markings/signage allowance	1	ls	100,000.00	100,000		
	SUBTOTAL					4,988,755	
320000	<b>PEDESTRIAN PAVING</b>						
	<u>Concrete sidewalks</u>	115,000	sf				
	gravel base; 12" thick	5,324	cy	50.00	266,200		
	Broom finish concrete paving; 5" thick	115,000	sf	16.00	1,840,000		
	<u>Concrete pads</u>	1,500	sf				
	gravel base; 12" thick	104	cy	50.00	5,200		
	Broom finish concrete paving; 8" thick	1,500	sf	24.00	36,000		
	<u>Porous concrete pavers; 20% of Plaza</u>	13,000	sf				
	Open graded stone subbase AASHTO #2; 32" thick	1,607	cy	50.00	80,350		
	Open graded base AASHTO #57; 6" thick	301	cy	50.00	15,050		
	Open graded bedding course AASHTO #8; 2" thick	101	cy	65.00	6,565		
	Pavers	13,000	sf	28.00	364,000		
	Geotextiles on top, bottom and sides of subbase	2,889	sy	3.00	8,667		
	<u>Concrete paving; 80% of Plaza</u>	52,000	sf				
	gravel base; 12" thick	2,407	cy	50.00	120,350		
	Broom finish concrete paving; 5" thick	52,000	sf	18.00	936,000		
320000	<b>STAIRS AND RAMPS</b>						
	Ramp/stairs premium	1	ls	250,000.00	250,000		
	SUBTOTAL					3,928,382	
320000	<b>SITE IMPROVEMENTS</b>						
320000	<b>SITE FURNISHINGS</b>						
	Bollards/bike racks/benches/flag poles etc.	1	ls	1,000,000.00	1,000,000		
	New restroom/tickets/concessions building	1,000	sf	700.00	700,000		
320000	<b>EXISTING STADIUM + TRACK ETR</b>					No Costs Assumed	
	Grass fields; sod	360,000	sf				
	Varsity Baseball Diamond; C1	100,000	sf	6.00	600,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	60,000.00	60,000		
	Varsity Softball Diamond; C2	55,000	sf	6.00	330,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	30,000.00	30,000		
	Junior Varsity Baseball Diamond; C3 + Cricket	60,000	sf	6.00	360,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	50,000.00	50,000		
	Little League Diamond; C4	40,000	sf	6.00	240,000		
	Backstops/benches etc.	1	ea	90,000.00	90,000		
	Infield	1	ea	30,000.00	30,000		
	Crumb football field; C5	60,000	sf	6.00	360,000		
	Worthen practice field; C6	45,000	sf	6.00	270,000		
	Tennis courts + Basketball courts					ETR	
320000	<b>ATHLETIC EQUIPMENT</b>						
	Equipment allowance	1	ls	180,000.00	180,000		
320000	<b>BLEACHERS AND SCOREBOARDS</b>						



PSR Options Cost Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>SITEWORK D.2</b>							
	Bleachers + pressbox	1,000	seat	900.00	900,000		
	Electronic scoreboard; wireless controls, multiboard	1	ea	75,000.00	75,000		
	Electronic scoreboard; softball	1	ea	45,000.00	45,000		
320000	FENCING						
	Fencing allowance	1	ls	500,000.00	500,000		
	SUBTOTAL					6,090,000	
320000	SITE WALLS						
	Retaining walls/site walls/seat walls	1	ls	750,000.00	750,000		
	SUBTOTAL					750,000	
	<b>Landscaping</b>						
329900	LAWN AND SEED						
	Topsoil - imported 12" thick; swell 25%	15,741	cy	65.00	1,023,165		
	General Seeding	850,000	sf	0.50	425,000		
	Trees, Shrubs and Perennial planting area	1	ls	1,500,000.00	1,500,000		
	IRRIGATION						
	Irrigation area	360,000	sf	2.00	720,000		
	Wetlands reconstruction					NR	
	SUBTOTAL					3,668,165	
G30	CIVIL MECHANICAL UTILITIES						
210000	FIRE PROTECTION						
	12" CLDI	4,000	lf	150.00	600,000		
	8" CLDI	200	lf	100.00	20,000		
	6" CLDI	100	lf	95.00	9,500		
	Fire department connection	1	ea	2,500.00	2,500		
	Gate valve; hydrants	1	ls	60,000.00	60,000		
331000	CONNECTIONS						
	Connect to existing water line; 12" live tap	2	ea	15,000.00	30,000		
312000	EXCAVATION & BACKFILL						
	DI piping excavation/backfill (inside site)	4,300	lf	50.00	215,000		
	Pressure test & chlorinate	4,300	lf	7.50	32,250		
	Allowance for temporary water service	1	ea	25,000.00	25,000		
	Allowance for temporary support of existing utilities					NR	
	SUBTOTAL					994,250	
333000	SANITARY SEWER						
	PVC sewer pipe	1,850	lf	60.00	111,000		
	Sewer manholes	7	ea	6,000.00	42,000		
	Connection to existing	2	loc	15,000.00	30,000		
	Grease trap - 6,000 gal.	2	ea	35,000.00	70,000		
	SUBTOTAL					253,000	
334000	STORM DRAINAGE						
	Infiltration systems	11,500	sf	45.00	517,500		
	Hydrodynamic separators	6	ea	20,000.00	120,000		
	Storm systems; complete at parking; piping; CB + MH etc.	288,000	sf	10.00	2,880,000		
	<u>Sodded Athletic fields</u>						
	Drainage at field	360,000	sf	1.00	Included w/fields		
	SUBTOTAL					3,517,500	
G40	ELECTRICAL UTILITIES						
	Concrete:						
	Primary duct bank 6-5" duct bank	900	lf	50.00	45,000		
	Secondary service 4000A - two services	200	lf	50.00	10,000		
	Generator duct bank	100	lf	40.00	4,000		
	PV 5000A secondary service (10) - 4"C	100	lf	60.00	6,000		
	Communications duct bank 6-4"	750	lf	40.00	30,000		
	Transformer/generator pad	6	ea	3,000.00	18,000		



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<b>SITEWORK D.2</b>							
	Site lighting pole bases	56	ea	500.00	28,000		
	Excavation and backfill:						
	Primary duct bank 2-5" duct bank	900	lf	25.00	22,500		
	Secondary service 4000A	200	lf	30.00	6,000		
	Storage building 400A service	40	lf	22.00	880		
	Generator duct bank	100	lf	30.00	3,000		
	PV 5000A secondary service (10) - 4"C	100	lf	45.00	4,500		
	EV conduits				See Below		
	Communications duct bank 4-4"	750	lf	25.00	18,750		
	Site lighting circuitry	5,200	lf	6.00	31,200		
	2-2" PVC to sports field lighting	1,200	lf	10.00	12,000		
	CCTV circuitry	1,200	lf	6.00	7,200		
	Scoreboard power & data, misc. sports field power, allow	1,000	lf	6.00	6,000		
	SUBTOTAL					253,030	
	<u>Power</u>						
	<b>Site electrical 15 kVOLT- Transformers etc.</b>	1	ls	2,500,000.00	By Owner		
	Utility co. back charges				Included above		
	Primary duct bank	900	lf	180.00	162,000		
	Electric manhole	6	ea	12,500.00	75,000		
	Transformers + 15kVolt switchgear by Owner				Included above		
	Secondary service 4000A	200	lf	1,400.00	280,000		
	Generator:						
	Generator service	100	lf	400.00	40,000		
	PV:						
	PV 5000A secondary service (10) - 4"C	400	lf	600.00	240,000		
	<u>Communications</u>						
	Connect to existing utility pole	1	ea	1,500.00	1,500		
	Communications duct bank	750	lf	150.00	112,500		
	Communication manhole	2	ea	12,500.00	25,000		
	<u>Site Lighting</u>						
	Allowance	360,000	sf	2.00	720,000		
	<u>EV Stations</u>						
	EV stations; single	20	loc	15,000.00	300,000		
	EV stations; EV ready; conduit only	75	loc	4,000.00	300,000		
	EV stations; EV ready; conduit + wiring	50	loc	7,000.00	350,000		
	<u>Sports Fields</u>						
	Sports field lighting, allow 1 baseball field; 1 softball field + rectangle field	2	loc	460,000.00	920,000		
	Fixture MUSCO				Included above		
	Sports field lighting circuitry	1,200	lf	12.00	Included above		
	Scoreboard power & data, misc. sports field power, allow	1	ls	10,000.00	Included above		
	Rough-in, allow	1	ls	35,000.00	Included above		
	<u>Site Demolition</u>						
	Site demolition work				Included w/ building		
	SUBTOTAL					3,526,000	
<b>TOTAL - SITE DEVELOPMENT</b>							<b>\$33,799,050</b>



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GFA

36,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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F.1 - NEW FIELDHOUSE - OPTION 1

**GROSS FLOOR AREA CALCULATION**

Level 1

36,000

**TOTAL GROSS FLOOR AREA (GFA)**

**36,000 sf**

**A10 FOUNDATIONS**

**A1010 STANDARD FOUNDATIONS**

Strip Footings: 1 x 3

Formwork	1,532	sf	15.00	22,980
Re-bar	10,111	lbs.	2.50	25,278
Concrete material	60	cy	160.00	9,600
Placing concrete	60	cy	120.00	7,200

Perimeter foundation walls: 20" Thick x 3.5 ft H

Formwork	5,362	sf	21.00	112,602
Re-bar	13,405	lbs.	2.50	33,513
Concrete material	174	cy	160.00	27,840
Placing concrete	174	cy	120.00	20,880
Form shelf	766	lf	8.00	6,128

Spread Footings: 9 x 9 x 2

Formwork	6,480	sf	18.00	116,640
Re-bar	43,740	lbs.	2.50	109,350
Concrete material	567	cy	160.00	90,720
Placing concrete	567	cy	120.00	68,040
Set anchor bolts grout plates	90	ea	250.00	22,500

Piers

Formwork	1,080	sf	24.00	25,920
Re-bar	12,150	lbs	2.50	30,375
Concrete material	42	cy	160.00	6,720
Placing concrete	42	cy	160.00	6,720

070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Dampproofing @ foundation wall	3,064	sf	4.00	12,256
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072100 THERMAL INSULATION

Rigid insulation to face of foundation wall	3,064	sf	3.00	9,192
Brick Shelf 4" insulation	766	lf	20.00	15,320

312000 EARTHWORK

Strip footings

Excavation	851	cy	14.00	11,914
Reuse excess material on site	234	cy	15.00	3,510
Backfill with select fill	617	cy	25.00	15,425

Spread footings

Excavation	1,613	cy	14.00	22,582
Reuse excess material on site	609	cy	15.00	9,135
Backfill with select fill	1,004	cy	25.00	25,100

Miscellaneous

Foundation drain	766	lf	30.00	22,980
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SUBTOTAL

890,420

**A1020 SPECIAL FOUNDATIONS**

Rigid inclusions	36,000	sf	35.00	1,260,000
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SUBTOTAL

1,260,000

**A1030 LOWEST FLOOR CONSTRUCTION**

033000 CONCRETE

Vapor barrier, 15mils	36,000	sf	1.25	45,000
Slab on grade	36,000	sf		
WWF reinforcement	41,400	sf	1.85	76,590
Concrete - 5" thick	574	cy	170.00	97,580



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36,000

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**F.1 - NEW FIELDHOUSE - OPTION 1**

	Placing concrete	574	cy	65.00	37,310		
	Finishing and curing concrete	36,000	sf	3.00	108,000		
	Control joints - saw cut	36,000	sf	0.10	3,600		
072100	<b>THERMAL INSULATION</b>						
	Under slab insulation, 2" thick under slab	36,000	sf	3.00	108,000		
312000	<b>EARTHWORK</b>						
	Gravel base, 12"	1,333	cy	45.00	59,985		
	Allowance for underslab drainage	36,000	sf	2.00	72,000		
	Compact existing sub-grade	36,000	sf	0.50	18,000		
	Underslab E&B for plumbing	36,000	sf	1.50	54,000		
	SUBTOTAL					680,065	

<b>TOTAL - FOUNDATIONS</b>	<b>\$2,830,485</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

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

**B1010 FLOOR CONSTRUCTION**

SUBTOTAL

-

**B1020 ROOF CONSTRUCTION**

051200	<b>STRUCTURAL STEEL FRAMING</b>						
	Structural steel framing; Complete; 13 lbs per SF	234	tns	6,500.00	1,521,000		
	<u>Decking</u>						
	3" galvanized metal deck, acoustic	36,000	sf	12.00	432,000		
078100	<b>FIREPROOFING/FIRESTOPPING</b>						
	Fireproofing to columns, beams and deck; 1 hr - includes Intumescent	36,000	sf	5.00	NR		
	SUBTOTAL					1,953,000	

<b>TOTAL - SUPERSTRUCTURE</b>	<b>\$1,953,000</b>
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**B20 EXTERIOR CLOSURE**

**B2010 EXTERIOR WALLS**

Exterior Wall Area

26,810 Total closure area

21,448 sf total area solid

**042000 MASONRY**

	Brick veneer; 60% of Solid	12,869	sf	44.00	566,236		
	8" Mineral wool at exterior closure (2 layers 4")	21,448	sf	7.50	160,860		
	Miscellaneous flashings and sealants	21,448	sf	1.50	32,172		
	Staging to exterior wall	21,448	sf	4.00	85,792		

**055000 MISC. METALS**

	Misc. metals at masonry including loose lintels (relieving angles included in steel tns)	12,869	sf	1.50	19,304		
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PSR Options Cost Estimate

GFA

36,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**F.1 - NEW FIELDHOUSE - OPTION 1**

070001	WATERPROOFING, DAMPPROOFING AND CAULKING						
	Air barrier	21,448	sf	10.00	214,480		
	Miscellaneous sealants to closure	21,448	sf	1.00	21,448		
072100	THERMAL INSULATION						
	4" Cellulose insulation in stud	21,448	sf	3.25	69,706		
	Insulation at glazed openings	1,787	lf	6.00	10,722		
076400	CLADDING						
	Composite metal panel, Alucobond or equal; 40%	8,579	sf	100.00	857,900		
092900	GYPSUM BOARD ASSEMBLIES						
	Exterior wall;						
	6" Stud backup	21,448	sf	16.00	343,168		
	Gypsum Sheathing	21,448	sf	3.50	75,068		
	Drywall lining to interior face of stud backup; IRGWB	21,448	sf	6.00	128,688		
101400	SIGNAGE						
	Exterior signage - allowance	1	ls	10,000.00	10,000		
	SUBTOTAL					2,595,544	
<b>B2020</b>	<b>WINDOWS</b>						
	Exterior Wall Area	5,362	sf				
061000	ROUGH CARPENTRY						
	Wood blocking at openings	1,787	lf	10.00	17,870		
070001	WATERPROOFING, DAMPPROOFING AND CAULKING						
	Air barrier/flashing at windows	1,787	lf	10.00	17,870		
	Backer rod & double sealant	1,787	lf	11.00	19,657		
080001	METAL WINDOWS						
	Aluminum windows, triple glazed including interior and exterior trim per details	5,362	sf	175.00	938,350		
	Passive house premium					NR	
089000	LOUVERS						
	Louvers					N/A	
	SUBTOTAL					993,747	
<b>B2030</b>	<b>EXTERIOR DOORS</b>						
	Allowance for exterior doors	36,000	gsf	1.00	36,000		
	SUBTOTAL					36,000	

**TOTAL - EXTERIOR CLOSURE**

**\$3,625,291**

**B30 ROOFING**

061000	ROUGH CARPENTRY						
	Rough carpentry and blocking @ roof	36,000	sf	1.50	54,000		
070002	ROOFING AND FLASHING	36,000	total area				
	PVC roof membrane system, white or gray, 1/2" coverboard, 10" polyiso insulation, vapor barrier	36,000	sf	33.00	1,188,000		
	Miscellaneous Roofing						
	Miscellaneous flashings/copings/walkway pads etc.	36,000	sf	4.00	144,000		
	SUBTOTAL					1,386,000	

**B3020 ROOF OPENINGS**

SUBTOTAL

-

**TOTAL - ROOFING**

**\$1,386,000**



PSR Options Cost Estimate

GFA

36,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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F.1 - NEW FIELDHOUSE - OPTION 1

**C10 INTERIOR CONSTRUCTION**

**C1010 PARTITIONS**

**040001 MASONRY**

Allowance for masonry partitions 4,508 sf 35.00 157,780

**061000 ROUGH CARPENTRY**

Backer panels in electrical closets 1 ls 10,000.00 10,000

Wood blocking at interiors 36,000 gsf 0.50 18,000

**070001 WATERPROOFING, DAMPPROOFING AND CAULKING**

Miscellaneous sealants throughout building 36,000 gsf 1.00 36,000

SUBTOTAL 221,780

**C1020 INTERIOR DOORS**

Doors, frames, hardware; complete 10 lvs 3,500.00 35,000

SUBTOTAL 35,000

**C1030 SPECIALTIES / MILLWORK**

**055000 MISCELLANEOUS METALS**

Miscellaneous metals throughout building 36,000 gsf 3.00 108,000

**101400 SIGNAGE**

Room identification, directional & safety signage, building directory  
+ environmental graphics 36,000 gsf 2.00 72,000

**102800 TOILET ACCESSORIES**

Toilet accessories/compartments 2 rms 1,500.00 3,000

**104400 FIRE PROTECTION SPECIALTIES**

Fire extinguisher cabinets 1 ls 8,021.86 8,022

AED cabinets 1 ls 2,000.00 2,000

**105000 LOCKERS**

Student lockers 36,000 gsf 1.50 54,000

SUBTOTAL 247,022

**TOTAL - INTERIOR CONSTRUCTION**

**\$503,802**

**C20 STAIRCASES**

**C2010 STAIR CONSTRUCTION**

SUBTOTAL

**C2020 STAIR FINISHES**

SUBTOTAL

**TOTAL - STAIRCASES**

**C30 INTERIOR FINISHES**

**C3010 WALL FINISHES**

Wall finishes complete package 36,000 gsf 3.00 108,000

SUBTOTAL 108,000

**C3020 FLOOR FINISHES**

Rubber flooring 26,700 sf 18.00 480,600

Floor finishes; track 7,500 sf 30.00 225,000

SUBTOTAL 705,600

**C3030 CEILING FINISHES**





PSR Options Cost Estimate

GFA

36,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**F.1 - NEW FIELDHOUSE - OPTION 1**

Cap over rooms	4,224	sf	30.00	126,720		
Ceiling finishes; paint exposed structure	36,000	gsf	3.00	108,000		
SUBTOTAL						234,720

<b>TOTAL - INTERIOR FINISHES</b>							<b>\$1,048,320</b>
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**D10 CONVEYING SYSTEMS**

**D1010 ELEVATOR**

SUBTOTAL							-
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<b>TOTAL - CONVEYING SYSTEMS</b>							
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**D20 PLUMBING**

**D20 PLUMBING, GENERALLY**

Plumbing package complete	36,000	gsf	10.00	360,000		
SUBTOTAL						360,000

<b>TOTAL - PLUMBING</b>							<b>\$360,000</b>
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**D30 HVAC**

**D30 HVAC, GENERALLY**

HVAC System	36,000	gsf	50.00	1,800,000		
SUBTOTAL						1,800,000

<b>TOTAL - HVAC</b>							<b>\$1,800,000</b>
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**D40 FIRE PROTECTION**

**D40 FIRE PROTECTION, GENERALLY**

<u>Fire Equipment</u>						
Sprinkler system; complete	36,000	gsf	9.00	324,000		
SUBTOTAL						324,000

<b>TOTAL - FIRE PROTECTION</b>							<b>\$324,000</b>
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**D50 ELECTRICAL**

**D5010 ELECTRICAL SYSTEMS**

**Gear & Distribution**

Normal power distribution system						
Panelboards/feeders	36,000	gsf	6.00	216,000		
<u>Equipment Wiring</u>						
Feeders + Electrical to equipment	36,000	gsf	7.00	252,000		
SUBTOTAL						468,000

**D5020 LIGHTING & POWER**

Lighting, Controls + Power	36,000	gsf	12.00	432,000		
SUBTOTAL						432,000

**D5030 COMMUNICATION & SECURITY SYSTEMS**

Telecommunications/PA + Clock	36,000	gsf	4.00	144,000		
<u>Fire Alarm</u>	36,000	gsf	3.00	108,000		
<u>Security System</u>	36,000	gsf	10.00	360,000		
SUBTOTAL						612,000

**D5040 OTHER ELECTRICAL SYSTEMS**

Common Work Results for Electrical

Lightning prevention	36,000	gsf	0.30	10,800		
Grounding	36,000	gsf	0.40	14,400		
Misc. demolition work	36,000	gsf	0.25	9,000		
Temp power and lights	36,000	gsf	1.20	43,200		



PSR Options Cost Estimate

GFA

36,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**F.1 - NEW FIELDHOUSE - OPTION 1**

Seismic restraints/Coordination/misc.

36,000

gsf

1.00

36,000

SUBTOTAL

113,400

**TOTAL - ELECTRICAL**

**\$1,625,400**

**E10 EQUIPMENT**

**E10 EQUIPMENT, GENERALLY**

AV Equipment

1

ls

100,000.00

100,000

**116600 GYM EQUIPMENT**

Gym Equipment

1

ls

500,000.00

500,000

**126000 SEATING**

Retractable bleachers

750

seat

250.00

187,500

SUBTOTAL

787,500

**TOTAL - EQUIPMENT**

**\$787,500**

**E20 FURNISHINGS**

**E2010 FIXED FURNISHINGS**

**122100 WINDOW TREATMENT**

Window shades at exterior glazing; electric

5,362

sf

30.00

160,860

SUBTOTAL

160,860

**E2020 MOVABLE FURNISHINGS**

All movable furnishings to be provided and installed by owner

SUBTOTAL

NIC

**TOTAL - FURNISHINGS**

**\$160,860**

**F10 SPECIAL CONSTRUCTION**

**F10 SPECIAL CONSTRUCTION**

SUBTOTAL

-

**TOTAL - SPECIAL CONSTRUCTION**

**F20 SELECTIVE BUILDING DEMOLITION**

**F2010 BUILDING ELEMENTS DEMOLITION**

No items in this section

SUBTOTAL

**F2020 HAZARDOUS COMPONENTS ABATEMENT**

See main summary for HazMat allowance

See Summary

SUBTOTAL

**TOTAL - SELECTIVE BUILDING DEMOLITION**

**SUBTOTAL**

**\$16,404,658**



PSR Options Cost Estimate

GFA

72,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**F.2 - NEW FIELDHOUSE OPTION 2**

**GROSS FLOOR AREA CALCULATION**

Level 1

72,000

**TOTAL GROSS FLOOR AREA (GFA)**

**72,000 sf**

**A10 FOUNDATIONS**

**A1010 STANDARD FOUNDATIONS**

Strip Footings: 1 x 3

Formwork	2,200	sf	15.00	33,000
Re-bar	14,520	lbs.	2.50	36,300
Concrete material	86	cy	160.00	13,760
Placing concrete	86	cy	120.00	10,320

Perimeter foundation walls: 20" Thick x 3.5 ft H

Formwork	7,700	sf	21.00	161,700
Re-bar	19,250	lbs.	2.50	48,125
Concrete material	250	cy	160.00	40,000
Placing concrete	250	cy	120.00	30,000
Form shelf	1,100	lf	8.00	8,800

Spread Footings: 9 x 9 x 2

Formwork	12,960	sf	18.00	233,280
Re-bar	87,480	lbs.	2.50	218,700
Concrete material	1,134	cy	160.00	181,440
Placing concrete	1,134	cy	120.00	136,080
Set anchor bolts grout plates	180	ea	250.00	45,000

Piers

Formwork	2,160	sf	24.00	51,840
Re-bar	24,300	lbs	2.50	60,750
Concrete material	84	cy	160.00	13,440
Placing concrete	84	cy	160.00	13,440

070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Dampproofing @ foundation wall	4,400	sf	4.00	17,600
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072100 THERMAL INSULATION

Rigid insulation to face of foundation wall	4,400	sf	3.00	13,200
Brick Shelf 4" insulation	1,100	lf	20.00	22,000

312000 EARTHWORK

Strip footings

Excavation	1,222	cy	14.00	17,108
Reuse excess material on site	336	cy	15.00	5,040
Backfill with select fill	886	cy	25.00	22,150

Spread footings

Excavation	3,227	cy	14.00	45,178
Reuse excess material on site	1,218	cy	15.00	18,270
Backfill with select fill	2,009	cy	25.00	50,225

Miscellaneous

Foundation drain	1,100	lf	30.00	33,000
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SUBTOTAL

1,579,746

**A1020 SPECIAL FOUNDATIONS**

Rigid inclusions	72,000	sf	35.00	2,520,000
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SUBTOTAL

2,520,000

**A1030 LOWEST FLOOR CONSTRUCTION**

033000 CONCRETE

Vapor barrier, 15mils	72,000	sf	1.25	90,000
Slab on grade	72,000	sf		
WWF reinforcement	82,800	sf	1.85	153,180
Concrete - 5" thick	1,148	cy	170.00	195,160



Lexington High School  
Town of Lexington, MA

07-Oct-24

PSR Options Cost Estimate

GFA

72,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>F.2 - NEW FIELDHOUSE OPTION 2</b>							
	Placing concrete	1,148	cy	65.00	74,620		
	Finishing and curing concrete	72,000	sf	3.00	216,000		
	Control joints - saw cut	72,000	sf	0.10	7,200		
072100	<b>THERMAL INSULATION</b>						
	Under slab insulation, 2" thick under slab	72,000	sf	3.00	216,000		
312000	<b>EARTHWORK</b>						
	Gravel base, 12"	2,667	cy	45.00	120,015		
	Allowance for underslab drainage	72,000	sf	2.00	144,000		
	Compact existing sub-grade	72,000	sf	0.50	36,000		
	Underslab E&B for plumbing	72,000	sf	1.50	108,000		
	SUBTOTAL					1,360,175	
<b>TOTAL - FOUNDATIONS</b>							<b>\$5,459,921</b>

**A20 BASEMENT CONSTRUCTION**

**A2010 BASEMENT EXCAVATION**

No Work in this section

SUBTOTAL

-

**A2020 BASEMENT WALLS**

No Work in this section

SUBTOTAL

-

**TOTAL - BASEMENT CONSTRUCTION**

**B10 SUPERSTRUCTURE**

**B1010 FLOOR CONSTRUCTION**

SUBTOTAL

-

**B1020 ROOF CONSTRUCTION**

**051200 STRUCTURAL STEEL FRAMING**

Structural steel framing; Complete; 13 lbs per SF

468

tns

6,500.00

3,042,000

Decking

3" galvanized metal deck, acoustic

72,000

sf

12.00

864,000

**078100 FIREPROOFING/FIRESTOPPING**

Fireproofing to columns, beams and deck; 1 hr - includes  
Intumescent

72,000

sf

5.00

NR

SUBTOTAL

3,906,000

**TOTAL - SUPERSTRUCTURE**

**\$3,906,000**

**B20 EXTERIOR CLOSURE**

**B2010 EXTERIOR WALLS**

Exterior Wall Area

38,500 Total closure area

30,800 sf total area solid

**042000 MASONRY**

Brick veneer; 60% of Solid

18,480

sf

44.00

813,120

8" Mineral wool at exterior closure (2 layers 4")

30,800

sf

7.50

231,000

Miscellaneous flashings and sealants

30,800

sf

1.50

46,200

Staging to exterior wall

30,800

sf

4.00

123,200

**055000 MISC. METALS**

Misc. metals at masonry including loose lintels (relieving angles  
included in steel tns)

18,480

sf

1.50

27,720



PSR Options Cost Estimate

GFA

72,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**F.2 - NEW FIELDHOUSE OPTION 2**

070001	WATERPROOFING, DAMPPROOFING AND CAULKING						
	Air barrier	30,800	sf	10.00	308,000		
	Miscellaneous sealants to closure	30,800	sf	1.00	30,800		
072100	THERMAL INSULATION						
	4" Cellulose insulation in stud	30,800	sf	3.25	100,100		
	Insulation at glazed openings	2,567	lf	6.00	15,402		
076400	CLADDING						
	Composite metal panel, Alucobond or equal; 40%	12,320	sf	100.00	1,232,000		
092900	GYPSUM BOARD ASSEMBLIES						
	Exterior wall;						
	6" Stud backup	30,800	sf	16.00	492,800		
	Gypsum Sheathing	30,800	sf	3.50	107,800		
	Drywall lining to interior face of stud backup; IRGWB	30,800	sf	6.00	184,800		
101400	SIGNAGE						
	Exterior signage - allowance	1	ls	10,000.00	10,000		
	SUBTOTAL					3,722,942	
<b>B2020</b>	<b>WINDOWS</b>						
	Exterior Wall Area	7,700	sf				
061000	ROUGH CARPENTRY						
	Wood blocking at openings	2,567	lf	10.00	25,670		
070001	WATERPROOFING, DAMPPROOFING AND CAULKING						
	Air barrier/flashing at windows	2,567	lf	10.00	25,670		
	Backer rod & double sealant	2,567	lf	11.00	28,237		
080001	METAL WINDOWS						
	Aluminum windows, triple glazed including interior and exterior trim per details	7,700	sf	175.00	1,347,500		
	Passive house premium					NR	
089000	LOUVERS						
	Louvers					N/A	
	SUBTOTAL					1,427,077	
<b>B2030</b>	<b>EXTERIOR DOORS</b>						
	Allowance for exterior doors	72,000	gsf	1.00	72,000		
	SUBTOTAL					72,000	
<b>TOTAL - EXTERIOR CLOSURE</b>							<b>\$5,222,019</b>

**B30 ROOFING**

061000	ROUGH CARPENTRY						
	Rough carpentry and blocking @ roof	72,000	sf	1.50	108,000		
070002	ROOFING AND FLASHING	72,000	total area				
	PVC roof membrane system, white or gray, 1/2" coverboard, 10" polyiso insulation, vapor barrier	72,000	sf	33.00	2,376,000		
	Miscellaneous Roofing						
	Miscellaneous flashings/copings/walkway pads etc.	72,000	sf	4.00	288,000		
	SUBTOTAL					2,772,000	
<b>B3020</b>	<b>ROOF OPENINGS</b>						
	SUBTOTAL					-	
<b>TOTAL - ROOFING</b>							<b>\$2,772,000</b>



PSR Options Cost Estimate

GFA

72,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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F.2 - NEW FIELDHOUSE OPTION 2

**C10 INTERIOR CONSTRUCTION**

**C1010 PARTITIONS**

040001 MASONRY

Allowance for masonry partitions 6,678 sf 35.00 233,730

061000 ROUGH CARPENTRY

Backer panels in electrical closets 1 ls 10,000.00 10,000

Wood blocking at interiors 72,000 gsf 0.50 36,000

070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Miscellaneous sealants throughout building 72,000 gsf 1.00 72,000

SUBTOTAL 351,730

**C1020 INTERIOR DOORS**

Doors, frames, hardware; complete 17 lvs 3,500.00 59,500

SUBTOTAL 59,500

**C1030 SPECIALTIES / MILLWORK**

055000 MISCELLANEOUS METALS

Miscellaneous metals throughout building 72,000 gsf 3.00 216,000

101400 SIGNAGE

Room identification, directional & safety signage, building directory  
+ environmental graphics 72,000 gsf 2.00 144,000

102800 TOILET ACCESSORIES

Toilet accessories/compartments 2 rms 1,500.00 3,000

104400 FIRE PROTECTION SPECIALTIES

Fire extinguisher cabinets 1 ls 13,164.71 13,165

AED cabinets 1 ls 2,000.00 2,000

105000 LOCKERS

Student lockers 72,000 gsf 1.50 108,000

SUBTOTAL 486,165

**TOTAL - INTERIOR CONSTRUCTION**

**\$897,395**

**C20 STAIRCASES**

**C2010 STAIR CONSTRUCTION**

SUBTOTAL

**C2020 STAIR FINISHES**

SUBTOTAL

-

**TOTAL - STAIRCASES**

**C30 INTERIOR FINISHES**

**C3010 WALL FINISHES**

Wall finishes complete package 72,000 gsf 3.00 216,000

SUBTOTAL 216,000

**C3020 FLOOR FINISHES**

Rubber flooring 50,400 sf 18.00 907,200

Floor finishes; Wood 50% of infield 14,000 sf 38.00 532,000

Floor finishes; track 18,000 sf 30.00 540,000

SUBTOTAL 1,979,200

**C3030 CEILING FINISHES**



PSR Options Cost Estimate

GFA

72,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**F.2 - NEW FIELDHOUSE OPTION 2**

Cap over rooms	6,700	sf	30.00	201,000		
Ceiling finishes; paint exposed structure	72,000	gsf	3.00	216,000		
SUBTOTAL						417,000

**TOTAL - INTERIOR FINISHES**

**\$2,612,200**

**D10 CONVEYING SYSTEMS**

**D1010 ELEVATOR**

SUBTOTAL						-
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**TOTAL - CONVEYING SYSTEMS**

**D20 PLUMBING**

**D20 PLUMBING, GENERALLY**

Plumbing package complete	72,000	gsf	10.00	720,000		
SUBTOTAL						720,000

**TOTAL - PLUMBING**

**\$720,000**

**D30 HVAC**

**D30 HVAC, GENERALLY**

HVAC System	72,000	gsf	50.00	3,600,000		
SUBTOTAL						3,600,000

**TOTAL - HVAC**

**\$3,600,000**

**D40 FIRE PROTECTION**

**D40 FIRE PROTECTION, GENERALLY**

<u>Fire Equipment</u>						
Sprinkler system; complete	72,000	gsf	9.00	648,000		
SUBTOTAL						648,000

**TOTAL - FIRE PROTECTION**

**\$648,000**

**D50 ELECTRICAL**

**D5010 ELECTRICAL SYSTEMS**

**Gear & Distribution**

Normal power distribution system						
Panelboards/feeders	72,000	gsf	6.00	432,000		
<u>Equipment Wiring</u>						
Feeders + Electrical to equipment	72,000	gsf	7.00	504,000		
SUBTOTAL						936,000

**D5020 LIGHTING & POWER**

Lighting, Controls + Power	72,000	gsf	12.00	864,000		
SUBTOTAL						864,000

**D5030 COMMUNICATION & SECURITY SYSTEMS**

Telecommunications/PA + Clock	72,000	gsf	4.00	288,000		
<u>Fire Alarm</u>	72,000	gsf	3.00	216,000		
<u>Security System</u>	72,000	gsf	10.00	720,000		
SUBTOTAL						1,224,000

**D5040 OTHER ELECTRICAL SYSTEMS**

Common Work Results for Electrical

Lightning prevention	72,000	gsf	0.30	21,600		
Grounding	72,000	gsf	0.40	28,800		
Misc. demolition work	72,000	gsf	0.25	18,000		
Temp power and lights	72,000	gsf	1.20	86,400		



PSR Options Cost Estimate

GFA

72,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**F.2 - NEW FIELDHOUSE OPTION 2**

Seismic restraints/Coordination/misc.

72,000

gsf

1.00

72,000

SUBTOTAL

226,800

**TOTAL - ELECTRICAL**

**\$3,250,800**

**E10 EQUIPMENT**

**E10 EQUIPMENT, GENERALLY**

AV Equipment

1

ls

100,000.00

100,000

**116600 GYM EQUIPMENT**

Gym Equipment

1

ls

500,000.00

500,000

**126000 SEATING**

Retractable bleachers

1,500

seat

250.00

375,000

SUBTOTAL

975,000

**TOTAL - EQUIPMENT**

**\$975,000**

**E20 FURNISHINGS**

**E2010 FIXED FURNISHINGS**

**122100 WINDOW TREATMENT**

Window shades at exterior glazing; electric

7,700

sf

30.00

231,000

SUBTOTAL

231,000

**E2020 MOVABLE FURNISHINGS**

All movable furnishings to be provided and installed by owner

SUBTOTAL

NIC

**TOTAL - FURNISHINGS**

**\$231,000**

**F10 SPECIAL CONSTRUCTION**

**F10 SPECIAL CONSTRUCTION**

SUBTOTAL

-

**TOTAL - SPECIAL CONSTRUCTION**

**F20 SELECTIVE BUILDING DEMOLITION**

**F2010 BUILDING ELEMENTS DEMOLITION**

No items in this section

SUBTOTAL

**F2020 HAZARDOUS COMPONENTS ABATEMENT**

See main summary for HazMat allowance

See Summary

SUBTOTAL

**TOTAL - SELECTIVE BUILDING DEMOLITION**

**SUBTOTAL**

**\$30,294,335**





Lexington High School  
Town of Lexington, MA

07-Oct-24

PSR Options Cost Estimate

GFA

48,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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G.1 FIELDHOUSE - ADD/RENOVATION OPTION 3

**GROSS FLOOR AREA CALCULATION**

New 13,600  
Reno 34,400

**TOTAL GROSS FLOOR AREA (GFA)**

**48,000 sf**

**A10 FOUNDATIONS**

**A1010 STANDARD FOUNDATIONS**

Strip Footings: 1 x 3

Formwork	600	sf	15.00	9,000
Re-bar	3,960	lbs.	2.50	9,900
Concrete material	23	cy	160.00	3,680
Placing concrete	23	cy	120.00	2,760

Perimeter foundation walls: 20" Thick x 3.5 ft H

Formwork	2,100	sf	21.00	44,100
Re-bar	5,250	lbs.	2.50	13,125
Concrete material	68	cy	160.00	10,880
Placing concrete	68	cy	120.00	8,160
Form shelf	300	lf	8.00	2,400

Spread Footings: 9 x 9 x 2

Formwork	2,448	sf	18.00	44,064
Re-bar	16,524	lbs.	2.50	41,310
Concrete material	214	cy	160.00	34,240
Placing concrete	214	cy	120.00	25,680
Set anchor bolts grout plates	34	ea	250.00	8,500

Piers

Formwork	34	ea		
Formwork	408	sf	24.00	9,792
Re-bar	4,590	lbs	2.50	11,475
Concrete material	16	cy	160.00	2,560
Placing concrete	16	cy	160.00	2,560

070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Damproofing @ foundation wall	1,200	sf	4.00	4,800
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072100 THERMAL INSULATION

Rigid insulation to face of foundation wall	1,200	sf	3.00	3,600
Brick Shelf 4" insulation	300	lf	20.00	6,000

312000 EARTHWORK

Strip footings

Excavation	333	cy	14.00	4,662
Reuse excess material on site	91	cy	15.00	1,365
Backfill with select fill	242	cy	25.00	6,050

Spread footings

Excavation	609	cy	14.00	8,526
Reuse excess material on site	230	cy	15.00	3,450
Backfill with select fill	379	cy	25.00	9,475

Miscellaneous

Foundation drain	300	lf	30.00	9,000
SUBTOTAL				341,114

**A1020 SPECIAL FOUNDATIONS**

Rigid inclusions	13,600	sf	35.00	476,000
SUBTOTAL				476,000

**A1030 LOWEST FLOOR CONSTRUCTION**

033000 CONCRETE

Vapor barrier, 15mils	13,600	sf	1.25	17,000
Slab on grade	13,600	sf		
WWF reinforcement	15,640	sf	1.85	28,934



PSR Options Cost Estimate

GFA

48,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>G.1 FIELDHOUSE - ADD/RENOVATION OPTION 3</b>							
	Concrete - 5" thick	217	cy	170.00	36,890		
	Placing concrete	217	cy	65.00	14,105		
	Finishing and curing concrete	13,600	sf	3.00	40,800		
	Control joints - saw cut	13,600	sf	0.10	1,360		
	Replace existing slab	34,400	sf	15.00	516,000		
072100	THERMAL INSULATION						
	Under slab insulation, 2" thick under slab	13,600	sf	3.00	40,800		
312000	EARTHWORK						
	Gravel base, 12"	504	cy	45.00	22,680		
	Allowance for underslab drainage	13,600	sf	2.00	27,200		
	Compact existing sub-grade	13,600	sf	0.50	6,800		
	Underslab E&B for plumbing	13,600	sf	1.50	20,400		
	SUBTOTAL					772,969	

<b>TOTAL - FOUNDATIONS</b>	<b>\$1,590,083</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**

SUBTOTAL

-

**B1020 ROOF CONSTRUCTION**

**051200 STRUCTURAL STEEL FRAMING**

Structural steel framing; Complete; 13 lbs per SF  
Modify existing framing

88 tns 6,500.00 572,000  
1 ls 150,000.00 150,000

Decking

3" galvanized metal deck, acoustic; assume all new

48,000 sf 12.00 576,000

**078100 FIREPROOFING/FIRESTOPPING**

Fireproofing to columns, beams and deck; 1 hr - includes  
Intumescent  
SUBTOTAL

48,000 sf 5.00 NR

1,298,000

<b>TOTAL - SUPERSTRUCTURE</b>	<b>\$1,298,000</b>
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**B20 EXTERIOR CLOSURE**

**B2010 EXTERIOR WALLS**

Exterior Wall Area

28,000 Total closure area  
22,400 sf total area solid

**042000 MASONRY**

Brick veneer; 100% of Solid  
8" Mineral wool at exterior closure (2 layers 4")  
Miscellaneous flashings and sealants

22,400 sf 44.00 985,600  
22,400 sf 7.50 168,000  
22,400 sf 1.50 33,600



PSR Options Cost Estimate

GFA

48,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>G.1 FIELDHOUSE - ADD/RENOVATION OPTION 3</b>							
	Staging to exterior wall	22,400	sf	4.00	89,600		
055000	MISC. METALS						
	Misc. metals at masonry including loose lintels (relieving angles included in steel tns)	22,400	sf	1.50	33,600		
070001	WATERPROOFING, DAMPPROOFING AND CAULKING						
	Air barrier	22,400	sf	10.00	224,000		
	Miscellaneous sealants to closure	22,400	sf	1.00	22,400		
072100	THERMAL INSULATION						
	4" Cellulose insulation in stud	22,400	sf	3.25	72,800		
	Insulation at glazed openings	1,867	lf	6.00	11,202		
076400	CLADDING						
	Composite metal panel, Alucobond or equal					NR	
092900	GYPSUM BOARD ASSEMBLIES						
	Exterior wall;						
	6" Stud backup	22,400	sf	16.00	358,400		
	Gypsum Sheathing	22,400	sf	3.50	78,400		
	Drywall lining to interior face of stud backup; IRGWB	22,400	sf	6.00	134,400		
101400	SIGNAGE						
	Exterior signage - allowance	1	ls	10,000.00	10,000		
	SUBTOTAL					2,222,002	
<b>B2020 WINDOWS</b>							
	Exterior Wall Area	5,600	sf				
061000	ROUGH CARPENTRY						
	Wood blocking at openings	1,867	lf	10.00	18,670		
070001	WATERPROOFING, DAMPPROOFING AND CAULKING						
	Air barrier/flashing at windows	1,867	lf	10.00	18,670		
	Backer rod & double sealant	1,867	lf	11.00	20,537		
080001	METAL WINDOWS						
	Aluminum windows, triple glazed including interior and exterior trim per details	5,600	sf	175.00	980,000		
	Passive house premium					NR	
089000	LOUVERS						
	Louvers					N/A	
	SUBTOTAL					1,037,877	
<b>B2030 EXTERIOR DOORS</b>							
	Allowance for exterior doors	48,000	gsf	1.00	48,000		
	SUBTOTAL					48,000	
<b>TOTAL - EXTERIOR CLOSURE</b>							<b>\$3,307,879</b>

**B30 ROOFING**

061000	ROUGH CARPENTRY						
	Rough carpentry and blocking @ roof	48,000	sf	1.50	72,000		
070002	ROOFING AND FLASHING	48,000	total area				
	PVC roof membrane system, white or gray, 1/2" coverboard, 10" polyiso insulation, vapor barrier	48,000	sf	33.00	1,584,000		
	Miscellaneous Roofing						
	Miscellaneous flashings/copings/walkway pads etc.	48,000	sf	4.00	192,000		
	SUBTOTAL					1,848,000	



PSR Options Cost Estimate

GFA

48,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**G.1 FIELDHOUSE - ADD/RENOVATION OPTION 3**

**B3020 ROOF OPENINGS**

SUBTOTAL

-

<b>TOTAL - ROOFING</b>	<b>\$1,848,000</b>
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**C10 INTERIOR CONSTRUCTION**

**C1010 PARTITIONS**

**040001 MASONRY**

Allowance for masonry partitions

6,104

sf

35.00

NR

**061000 ROUGH CARPENTRY**

Backer panels in electrical closets

1

ls

10,000.00

10,000

Wood blocking at interiors

48,000

gsf

0.50

24,000

**070001 WATERPROOFING, DAMPPROOFING AND CAULKING**

Miscellaneous sealants throughout building

48,000

gsf

1.00

48,000

SUBTOTAL

82,000

**C1020 INTERIOR DOORS**

Doors, frames, hardware; complete

17

lvs

3,500.00

NR

SUBTOTAL

-

**C1030 SPECIALTIES / MILLWORK**

**055000 MISCELLANEOUS METALS**

Miscellaneous metals throughout building

48,000

gsf

3.00

144,000

**101400 SIGNAGE**

Room identification, directional & safety signage, building directory + environmental graphics

48,000

gsf

2.00

96,000

**102800 TOILET ACCESSORIES**

Toilet accessories/compartments

2

rms

1,500.00

3,000

**104400 FIRE PROTECTION SPECIALTIES**

Fire extinguisher cabinets

1

ls

9,736.14

9,736

AED cabinets

1

ls

2,000.00

2,000

**105000 LOCKERS**

Student lockers

48,000

gsf

1.50

72,000

SUBTOTAL

326,736

<b>TOTAL - INTERIOR CONSTRUCTION</b>	<b>\$408,736</b>
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**C20 STAIRCASES**

**C2010 STAIR CONSTRUCTION**

SUBTOTAL

**C2020 STAIR FINISHES**

SUBTOTAL

-

<b>TOTAL - STAIRCASES</b>	
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**C30 INTERIOR FINISHES**

**C3010 WALL FINISHES**

Wall finishes complete package

48,000

gsf

3.00

144,000

SUBTOTAL

144,000

**C3020 FLOOR FINISHES**

Rubber flooring

36,900

sf

18.00

664,200



PSR Options Cost Estimate

GFA

48,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>G.1 FIELDHOUSE - ADD/RENOVATION OPTION 3</b>							
	Floor finishes; Wood 50% of infield	15,000	sf	38.00	570,000		
	Floor finishes; track	8,700	sf	30.00	261,000		
	SUBTOTAL					1,495,200	
<b>C3030 CEILING FINISHES</b>							
	Cap over rooms	5,664	sf	30.00	NR		
	Ceiling finishes; paint exposed structure	48,000	gsf	3.00	144,000		
	SUBTOTAL					144,000	
<b>TOTAL - INTERIOR FINISHES</b>							<b>\$1,783,200</b>
<b>D10 CONVEYING SYSTEMS</b>							
<b>D1010 ELEVATOR</b>							
	SUBTOTAL					-	
<b>TOTAL - CONVEYING SYSTEMS</b>							
<b>D20 PLUMBING</b>							
<b>D20 PLUMBING, GENERALLY</b>							
	Plumbing package complete	48,000	gsf	10.00	480,000		
	Temporary restrooms	1	ls	60,000.00	60,000		
	SUBTOTAL					540,000	
<b>TOTAL - PLUMBING</b>							<b>\$540,000</b>
<b>D30 HVAC</b>							
<b>D30 HVAC, GENERALLY</b>							
	HVAC System	48,000	gsf	50.00	2,400,000		
	SUBTOTAL					2,400,000	
<b>TOTAL - HVAC</b>							<b>\$2,400,000</b>
<b>D40 FIRE PROTECTION</b>							
<b>D40 FIRE PROTECTION, GENERALLY</b>							
	<u>Fire Equipment</u>						
	Sprinkler system; complete	48,000	gsf	9.00	432,000		
	SUBTOTAL					432,000	
<b>TOTAL - FIRE PROTECTION</b>							<b>\$432,000</b>
<b>D50 ELECTRICAL</b>							
<b>D5010 ELECTRICAL SYSTEMS</b>							
<b>Gear &amp; Distribution</b>							
	Normal power distribution system						
	Panelboards/feeders	48,000	gsf	6.00	288,000		
	<u>Equipment Wiring</u>						
	Feeders + Electrical to equipment	48,000	gsf	7.00	336,000		
	SUBTOTAL					624,000	
<b>D5020 LIGHTING &amp; POWER</b>							
	Lighting, Controls + Power	48,000	gsf	12.00	576,000		
	SUBTOTAL					576,000	
<b>D5030 COMMUNICATION &amp; SECURITY SYSTEMS</b>							
	Telecommunications/PA + Clock	48,000	gsf	4.00	192,000		
	<u>Fire Alarm</u>	48,000	gsf	3.00	144,000		
	<u>Security System</u>	48,000	gsf	10.00	480,000		
	SUBTOTAL					816,000	



PSR Options Cost Estimate

GFA

48,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**G.1 FIELDHOUSE - ADD/RENOVATION OPTION 3**

**D5040 OTHER ELECTRICAL SYSTEMS**

Common Work Results for Electrical

Lightning prevention	48,000	gsf	0.30	14,400	
Grounding	48,000	gsf	0.40	19,200	
Misc. demolition work	48,000	gsf	0.25	12,000	
Temp power and lights	48,000	gsf	1.20	57,600	
Seismic restraints/Coordination/misc.	48,000	gsf	1.00	48,000	
SUBTOTAL					151,200

<b>TOTAL - ELECTRICAL</b>	<b>\$2,167,200</b>
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**E10 EQUIPMENT**

**E10 EQUIPMENT, GENERALLY**

AV Equipment	1	ls	100,000.00	100,000	
116600 GYM EQUIPMENT					
Gym Equipment	1	ls	500,000.00	500,000	
126000 SEATING					
Retractable bleachers	1,500	seat	250.00	375,000	
SUBTOTAL					975,000

<b>TOTAL - EQUIPMENT</b>	<b>\$975,000</b>
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**E20 FURNISHINGS**

**E2010 FIXED FURNISHINGS**

122100 WINDOW TREATMENT					
Window shades at exterior glazing; electric	5,600	sf	30.00	168,000	
SUBTOTAL					168,000

**E2020 MOVABLE FURNISHINGS**

All movable furnishings to be provided and installed by owner

SUBTOTAL					NIC
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<b>TOTAL - FURNISHINGS</b>	<b>\$168,000</b>
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**F10 SPECIAL CONSTRUCTION**

**F10 SPECIAL CONSTRUCTION**

SUBTOTAL					-
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<b>TOTAL - SPECIAL CONSTRUCTION</b>	
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**F20 SELECTIVE BUILDING DEMOLITION**

**F2010 BUILDING ELEMENTS DEMOLITION**

Remove existing closure	9,870	sf	10.00	98,700	
Remove existing roofing	34,400	sf	5.00	172,000	
Gut demolition	34,400	sf	10.00	344,000	
SUBTOTAL					614,700

**F2020 HAZARDOUS COMPONENTS ABATEMENT**

See main summary for HazMat allowance

See Summary

SUBTOTAL					
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<b>TOTAL - SELECTIVE BUILDING DEMOLITION</b>	<b>\$614,700</b>
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<b>SUBTOTAL</b>	<b>\$17,532,798</b>
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PSR Options Cost Estimate

GFA

60,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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F.3 NEW FIELDHOUSE - OPTION 4

**GROSS FLOOR AREA CALCULATION**

Level 1

60,000

**TOTAL GROSS FLOOR AREA (GFA)**

**60,000 sf**

**A10 FOUNDATIONS**

**A1010 STANDARD FOUNDATIONS**

Strip Footings: 1 x 3

Formwork	2,008	sf	15.00	30,120
Re-bar	13,253	lbs.	2.50	33,133
Concrete material	78	cy	160.00	12,480
Placing concrete	78	cy	120.00	9,360

Perimeter foundation walls: 20" Thick x 3.5 ft H

Formwork	7,028	sf	21.00	147,588
Re-bar	17,570	lbs.	2.50	43,925
Concrete material	228	cy	160.00	36,480
Placing concrete	228	cy	120.00	27,360
Form shelf	1,004	lf	8.00	8,032

Spread Footings: 9 x 9 x 2

Formwork	150	ea		
Formwork	10,800	sf	18.00	194,400
Re-bar	72,900	lbs.	2.50	182,250
Concrete material	945	cy	160.00	151,200
Placing concrete	945	cy	120.00	113,400
Set anchor bolts grout plates	150	ea	250.00	37,500

Piers

Formwork	150	ea		
Formwork	1,800	sf	24.00	43,200
Re-bar	20,250	lbs	2.50	50,625
Concrete material	70	cy	160.00	11,200
Placing concrete	70	cy	160.00	11,200

070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Dampproofing @ foundation wall	4,016	sf	4.00	16,064
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072100 THERMAL INSULATION

Rigid insulation to face of foundation wall	4,016	sf	3.00	12,048
Brick Shelf 4" insulation	1,004	lf	20.00	20,080

312000 EARTHWORK

Strip footings

Excavation	1,116	cy	14.00	15,624
Reuse excess material on site	306	cy	15.00	4,590
Backfill with select fill	810	cy	25.00	20,250

Spread footings

Excavation	2,689	cy	14.00	37,646
Reuse excess material on site	1,015	cy	15.00	15,225
Backfill with select fill	1,674	cy	25.00	41,850

Miscellaneous

Foundation drain	1,004	lf	30.00	30,120
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SUBTOTAL

1,356,950

**A1020 SPECIAL FOUNDATIONS**

Rigid inclusions	60,000	sf	35.00	2,100,000
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SUBTOTAL

2,100,000

**A1030 LOWEST FLOOR CONSTRUCTION**

033000 CONCRETE

Vapor barrier, 15mils	60,000	sf	1.25	75,000
Slab on grade	60,000	sf		
WWF reinforcement	69,000	sf	1.85	127,650
Concrete - 5" thick	957	cy	170.00	162,690



Lexington High School  
Town of Lexington, MA

07-Oct-24

PSR Options Cost Estimate

GFA

60,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**F.3 NEW FIELDHOUSE - OPTION 4**

Placing concrete	957	cy	65.00	62,205		
Finishing and curing concrete	60,000	sf	3.00	180,000		
Control joints - saw cut	60,000	sf	0.10	6,000		

072100 THERMAL INSULATION

Under slab insulation, 2" thick under slab	60,000	sf	3.00	180,000		
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312000 EARTHWORK

Gravel base, 12"	2,222	cy	45.00	99,990		
Allowance for underslab drainage	60,000	sf	2.00	120,000		
Compact existing sub-grade	60,000	sf	0.50	30,000		
Underslab E&B for plumbing	60,000	sf	1.50	90,000		

SUBTOTAL

1,133,535

**TOTAL - FOUNDATIONS**

**\$4,590,485**

**A20 BASEMENT CONSTRUCTION**

**A2010 BASEMENT EXCAVATION**

No Work in this section

SUBTOTAL

-

**A2020 BASEMENT WALLS**

No Work in this section

SUBTOTAL

-

**TOTAL - BASEMENT CONSTRUCTION**

**B10 SUPERSTRUCTURE**

**B1010 FLOOR CONSTRUCTION**

SUBTOTAL

-

**B1020 ROOF CONSTRUCTION**

051200 STRUCTURAL STEEL FRAMING

Structural steel framing; Complete; 13 lbs per SF	390	tns	6,500.00	2,535,000		
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Decking

3" galvanized metal deck, acoustic	60,000	sf	12.00	720,000		
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078100 FIREPROOFING/FIRESTOPPING

Fireproofing to columns, beams and deck; 1 hr - includes Intumescent	60,000	sf	5.00	NR		
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SUBTOTAL

3,255,000

**TOTAL - SUPERSTRUCTURE**

**\$3,255,000**

**B20 EXTERIOR CLOSURE**

**B2010 EXTERIOR WALLS**

Exterior Wall Area

35,140 Total closure area

28,112 sf total area solid

042000 MASONRY

Brick veneer; 60% of Solid	16,867	sf	44.00	742,148		
8" Mineral wool at exterior closure (2 layers 4")	28,112	sf	7.50	210,840		
Miscellaneous flashings and sealants	28,112	sf	1.50	42,168		
Staging to exterior wall	28,112	sf	4.00	112,448		

055000 MISC. METALS

Misc. metals at masonry including loose lintels (relieving angles included in steel tns)	16,867	sf	1.50	25,301		
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Lexington High School  
Town of Lexington, MA

07-Oct-24

PSR Options Cost Estimate

GFA

60,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**F.3 NEW FIELDHOUSE - OPTION 4**

070001	WATERPROOFING, DAMPPROOFING AND CAULKING						
	Air barrier	28,112	sf	10.00	281,120		
	Miscellaneous sealants to closure	28,112	sf	1.00	28,112		
072100	THERMAL INSULATION						
	4" Cellulose insulation in stud	28,112	sf	3.25	91,364		
	Insulation at glazed openings	2,343	lf	6.00	14,058		
076400	CLADDING						
	Composite metal panel, Alucobond or equal; 40%	11,245	sf	100.00	1,124,500		
092900	GYPSUM BOARD ASSEMBLIES						
	Exterior wall;						
	6" Stud backup	28,112	sf	16.00	449,792		
	Gypsum Sheathing	28,112	sf	3.50	98,392		
	Drywall lining to interior face of stud backup; IRGWB	28,112	sf	6.00	168,672		
101400	SIGNAGE						
	Exterior signage - allowance	1	ls	10,000.00	10,000		
	SUBTOTAL					3,398,915	
<b>B2020</b>	<b>WINDOWS</b>						
	Exterior Wall Area	7,028	sf				
061000	ROUGH CARPENTRY						
	Wood blocking at openings	2,343	lf	10.00	23,430		
070001	WATERPROOFING, DAMPPROOFING AND CAULKING						
	Air barrier/flashings at windows	2,343	lf	10.00	23,430		
	Backer rod & double sealant	2,343	lf	11.00	25,773		
080001	METAL WINDOWS						
	Aluminum windows, triple glazed including interior and exterior trim per details	7,028	sf	175.00	1,229,900		
	Passive house premium					NR	
089000	LOUVERS						
	Louvers					N/A	
	SUBTOTAL					1,302,533	
<b>B2030</b>	<b>EXTERIOR DOORS</b>						
	Allowance for exterior doors	60,000	gsf	1.00	60,000		
	SUBTOTAL					60,000	
<b>TOTAL - EXTERIOR CLOSURE</b>							<b>\$4,761,448</b>

**B30 ROOFING**

061000	ROUGH CARPENTRY						
	Rough carpentry and blocking @ roof	60,000	sf	1.50	90,000		
070002	ROOFING AND FLASHING	60,000	total area				
	PVC roof membrane system, white or gray, 1/2" coverboard, 10" polyiso insulation, vapor barrier	60,000	sf	33.00	1,980,000		
	Miscellaneous Roofing						
	Miscellaneous flashings/copings/walkway pads etc.	60,000	sf	4.00	240,000		
	SUBTOTAL					2,310,000	
<b>B3020</b>	<b>ROOF OPENINGS</b>						
	SUBTOTAL					-	
<b>TOTAL - ROOFING</b>							<b>\$2,310,000</b>



PSR Options Cost Estimate

GFA

60,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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F.3 NEW FIELDHOUSE - OPTION 4

**C10 INTERIOR CONSTRUCTION**

**C1010 PARTITIONS**

040001 MASONRY

Allowance for masonry partitions 6,104 sf 35.00 213,640

061000 ROUGH CARPENTRY

Backer panels in electrical closets 1 ls 10,000.00 10,000

Wood blocking at interiors 60,000 gsf 0.50 30,000

070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Miscellaneous sealants throughout building 60,000 gsf 1.00 60,000

SUBTOTAL 313,640

**C1020 INTERIOR DOORS**

Doors, frames, hardware; complete 17 lvs 3,500.00 59,500

SUBTOTAL 59,500

**C1030 SPECIALTIES / MILLWORK**

055000 MISCELLANEOUS METALS

Miscellaneous metals throughout building 60,000 gsf 3.00 180,000

101400 SIGNAGE

Room identification, directional & safety signage, building directory  
+ environmental graphics 60,000 gsf 2.00 120,000

102800 TOILET ACCESSORIES

Toilet accessories/compartments 2 rms 1,500.00 3,000

104400 FIRE PROTECTION SPECIALTIES

Fire extinguisher cabinets 1 ls 11,450.43 11,450

AED cabinets 1 ls 2,000.00 2,000

105000 LOCKERS

Student lockers 60,000 gsf 1.50 90,000

SUBTOTAL 406,450

**TOTAL - INTERIOR CONSTRUCTION**

**\$779,590**

**C20 STAIRCASES**

**C2010 STAIR CONSTRUCTION**

SUBTOTAL

**C2020 STAIR FINISHES**

SUBTOTAL

-

**TOTAL - STAIRCASES**

**C30 INTERIOR FINISHES**

**C3010 WALL FINISHES**

Wall finishes complete package 60,000 gsf 3.00 180,000

SUBTOTAL 180,000

**C3020 FLOOR FINISHES**

Rubber flooring 44,000 sf 18.00 792,000

Floor finishes; Wood 50% of infield 14,000 sf 38.00 532,000

Floor finishes; track 13,000 sf 30.00 390,000

SUBTOTAL 1,714,000

**C3030 CEILING FINISHES**



PSR Options Cost Estimate

GFA

60,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**F.3 NEW FIELDHOUSE - OPTION 4**

Cap over rooms	5,664	sf	30.00	169,920		
Ceiling finishes; paint exposed structure	60,000	gsf	3.00	180,000		
SUBTOTAL						349,920

**TOTAL - INTERIOR FINISHES**

**\$2,243,920**

**D10 CONVEYING SYSTEMS**

**D1010 ELEVATOR**

SUBTOTAL						-
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**TOTAL - CONVEYING SYSTEMS**

**D20 PLUMBING**

**D20 PLUMBING, GENERALLY**

Plumbing package complete	60,000	gsf	10.00	600,000		
SUBTOTAL						600,000

**TOTAL - PLUMBING**

**\$600,000**

**D30 HVAC**

**D30 HVAC, GENERALLY**

HVAC System	60,000	gsf	50.00	3,000,000		
SUBTOTAL						3,000,000

**TOTAL - HVAC**

**\$3,000,000**

**D40 FIRE PROTECTION**

**D40 FIRE PROTECTION, GENERALLY**

<u>Fire Equipment</u>						
Sprinkler system; complete	60,000	gsf	9.00	540,000		
SUBTOTAL						540,000

**TOTAL - FIRE PROTECTION**

**\$540,000**

**D50 ELECTRICAL**

**D5010 ELECTRICAL SYSTEMS**

**Gear & Distribution**

Normal power distribution system						
Panelboards/feeders	60,000	gsf	6.00	360,000		
<u>Equipment Wiring</u>						
Feeders + Electrical to equipment	60,000	gsf	7.00	420,000		
SUBTOTAL						780,000

**D5020 LIGHTING & POWER**

Lighting, Controls + Power	60,000	gsf	12.00	720,000		
SUBTOTAL						720,000

**D5030 COMMUNICATION & SECURITY SYSTEMS**

Telecommunications/PA + Clock	60,000	gsf	4.00	240,000		
<u>Fire Alarm</u>	60,000	gsf	3.00	180,000		
<u>Security System</u>	60,000	gsf	10.00	600,000		
SUBTOTAL						1,020,000

**D5040 OTHER ELECTRICAL SYSTEMS**

Common Work Results for Electrical

Lightning prevention	60,000	gsf	0.30	18,000		
Grounding	60,000	gsf	0.40	24,000		
Misc. demolition work	60,000	gsf	0.25	15,000		
Temp power and lights	60,000	gsf	1.20	72,000		



PSR Options Cost Estimate

GFA

60,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**F.3 NEW FIELDHOUSE - OPTION 4**

Seismic restraints/Coordination/misc.

60,000

gsf

1.00

60,000

SUBTOTAL

189,000

**TOTAL - ELECTRICAL**

**\$2,709,000**

**E10 EQUIPMENT**

**E10 EQUIPMENT, GENERALLY**

AV Equipment

1

ls

100,000.00

100,000

**116600 GYM EQUIPMENT**

Gym Equipment

1

ls

500,000.00

500,000

**126000 SEATING**

Retractable bleachers

1,500

seat

250.00

375,000

SUBTOTAL

975,000

**TOTAL - EQUIPMENT**

**\$975,000**

**E20 FURNISHINGS**

**E2010 FIXED FURNISHINGS**

**122100 WINDOW TREATMENT**

Window shades at exterior glazing; electric

7,028

sf

30.00

210,840

SUBTOTAL

210,840

**E2020 MOVABLE FURNISHINGS**

All movable furnishings to be provided and installed by owner

SUBTOTAL

NIC

**TOTAL - FURNISHINGS**

**\$210,840**

**F10 SPECIAL CONSTRUCTION**

**F10 SPECIAL CONSTRUCTION**

SUBTOTAL

-

**TOTAL - SPECIAL CONSTRUCTION**

**F20 SELECTIVE BUILDING DEMOLITION**

**F2010 BUILDING ELEMENTS DEMOLITION**

No items in this section

SUBTOTAL

**F2020 HAZARDOUS COMPONENTS ABATEMENT**

See main summary for HazMat allowance

See Summary

SUBTOTAL

**TOTAL - SELECTIVE BUILDING DEMOLITION**

**SUBTOTAL**

**\$25,975,283**



PSR Options Cost Estimate

GFA

34,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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G.0 FIELDHOUSE - ADD/RENOVATION OPTION 5

**GROSS FLOOR AREA CALCULATION**

Reno

34,000

**TOTAL GROSS FLOOR AREA (GFA)**

**34,000 sf**

**A10 FOUNDATIONS**

**A1010 STANDARD FOUNDATIONS**

SUBTOTAL

-

**A1020 SPECIAL FOUNDATIONS**

SUBTOTAL

-

**A1030 LOWEST FLOOR CONSTRUCTION**

Replace existing slab

**34,000**

sf

15.00

510,000

SUBTOTAL

510,000

**TOTAL - FOUNDATIONS**

**\$510,000**

**A20 BASEMENT CONSTRUCTION**

**A2010 BASEMENT EXCAVATION**

No Work in this section

SUBTOTAL

-

**A2020 BASEMENT WALLS**

No Work in this section

SUBTOTAL

-

**TOTAL - BASEMENT CONSTRUCTION**

**B10 SUPERSTRUCTURE**

**B1010 FLOOR CONSTRUCTION**

SUBTOTAL

-

**B1020 ROOF CONSTRUCTION**

**051200 STRUCTURAL STEEL FRAMING**

Modify existing framing

**1**

ls

150,000.00

NR

Decking

3" galvanized metal deck, acoustic; assume all new

**34,000**

sf

12.00

ETR

**078100 FIREPROOFING/FIRESTOPPING**

Fireproofing to columns, beams and deck; 1 hr - includes

**34,000**

sf

5.00

NR

Intumescent

SUBTOTAL

-

**TOTAL - SUPERSTRUCTURE**

**B20 EXTERIOR CLOSURE**

**B2010 EXTERIOR WALLS**

Exterior Wall Area

23,030 Total closure area

18,424 sf total area solid

**042000 MASONRY**

Brick veneer; 100% of Solid

**18,424**

sf

44.00

810,656

8" Mineral wool at exterior closure (2 layers 4")

**18,424**

sf

7.50

138,180

Miscellaneous flashings and sealants

**18,424**

sf

1.50

27,636



PSR Options Cost Estimate

GFA

34,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>G.0 FIELDHOUSE - ADD/RENOVATION OPTION 5</b>							
	Staging to exterior wall	18,424	sf	4.00	73,696		
055000	MISC. METALS						
	Misc. metals at masonry including loose lintels (relieving angles included in steel tns)	18,424	sf	1.50	27,636		
070001	WATERPROOFING, DAMPPROOFING AND CAULKING						
	Air barrier	18,424	sf	10.00	184,240		
	Miscellaneous sealants to closure	18,424	sf	1.00	18,424		
072100	THERMAL INSULATION						
	4" Cellulose insulation in stud	18,424	sf	3.25	59,878		
	Insulation at glazed openings	1,535	lf	6.00	9,210		
076400	CLADDING						
	Composite metal panel, Alucobond or equal					NR	
092900	GYPSUM BOARD ASSEMBLIES						
	Exterior wall;						
	6" Stud backup	18,424	sf	16.00	294,784		
	Gypsum Sheathing	18,424	sf	3.50	64,484		
	Drywall lining to interior face of stud backup; IRGWB	18,424	sf	6.00	110,544		
101400	SIGNAGE						
	Exterior signage - allowance	1	ls	10,000.00	10,000		
	SUBTOTAL					1,829,368	
<b>B2020 WINDOWS</b>							
	Exterior Wall Area	4,606	sf				
061000	ROUGH CARPENTRY						
	Wood blocking at openings	1,535	lf	10.00	15,350		
070001	WATERPROOFING, DAMPPROOFING AND CAULKING						
	Air barrier/flashing at windows	1,535	lf	10.00	15,350		
	Backer rod & double sealant	1,535	lf	11.00	16,885		
080001	METAL WINDOWS						
	Aluminum windows, triple glazed including interior and exterior trim per details	4,606	sf	175.00	806,050		
	Passive house premium					NR	
089000	LOUVERS						
	Louvers					N/A	
	SUBTOTAL					853,635	
<b>B2030 EXTERIOR DOORS</b>							
	Allowance for exterior doors	34,000	gsf	1.00	34,000		
	SUBTOTAL					34,000	
<b>TOTAL - EXTERIOR CLOSURE</b>							<b>\$2,717,003</b>

**B30 ROOFING**

061000	ROUGH CARPENTRY						
	Rough carpentry and blocking @ roof	34,000	sf	1.50	51,000		
070002	ROOFING AND FLASHING	34,000	total area				
	PVC roof membrane system, white or gray, 1/2" coverboard, 10" polyiso insulation, vapor barrier	34,000	sf	33.00	1,122,000		
	Miscellaneous Roofing						
	Miscellaneous flashings/copings/walkway pads etc.	34,000	sf	4.00	136,000		
	SUBTOTAL					1,309,000	



PSR Options Cost Estimate

GFA

34,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**G.0 FIELDHOUSE - ADD/RENOVATION OPTION 5**

**B3020 ROOF OPENINGS**

SUBTOTAL

-

<b>TOTAL - ROOFING</b>	<b>\$1,309,000</b>
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**C10 INTERIOR CONSTRUCTION**

**C1010 PARTITIONS**

**040001 MASONRY**

Allowance for masonry partitions

**6,104**

sf

35.00

NR

**061000 ROUGH CARPENTRY**

Backer panels in electrical closets

**1**

ls

10,000.00

10,000

Wood blocking at interiors

**34,000**

gsf

0.50

17,000

**070001 WATERPROOFING, DAMPPROOFING AND CAULKING**

Miscellaneous sealants throughout building

**34,000**

gsf

1.00

34,000

SUBTOTAL

61,000

**C1020 INTERIOR DOORS**

Doors, frames, hardware; complete

**17**

lvs

3,500.00

NR

SUBTOTAL

-

**C1030 SPECIALTIES / MILLWORK**

**055000 MISCELLANEOUS METALS**

Miscellaneous metals throughout building

**34,000**

gsf

3.00

102,000

**101400 SIGNAGE**

Room identification, directional & safety signage, building directory  
+ environmental graphics

**34,000**

gsf

2.00

68,000

**102800 TOILET ACCESSORIES**

Toilet accessories/compartments

**2**

rms

1,500.00

3,000

**104400 FIRE PROTECTION SPECIALTIES**

Fire extinguisher cabinets

**1**

ls

7,736.14

7,736

AED cabinets

**1**

ls

2,000.00

2,000

**105000 LOCKERS**

Student lockers

**34,000**

gsf

1.50

51,000

SUBTOTAL

233,736

<b>TOTAL - INTERIOR CONSTRUCTION</b>	<b>\$294,736</b>
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**C20 STAIRCASES**

**C2010 STAIR CONSTRUCTION**

SUBTOTAL

**C2020 STAIR FINISHES**

SUBTOTAL

-

<b>TOTAL - STAIRCASES</b>	
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**C30 INTERIOR FINISHES**

**C3010 WALL FINISHES**

Wall finishes complete package

**34,000**

gsf

3.00

102,000

SUBTOTAL

102,000

**C3020 FLOOR FINISHES**

Rubber flooring

**26,100**

sf

18.00

469,800



PSR Options Cost Estimate

GFA

34,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>G.0 FIELDHOUSE - ADD/RENOVATION OPTION 5</b>							
	Floor finishes; track	6,200	sf	30.00	186,000		
	SUBTOTAL					655,800	
<b>C3030 CEILING FINISHES</b>							
	Ceiling finishes; paint exposed structure	34,000	gsf	3.00	102,000		
	SUBTOTAL					102,000	
<b>TOTAL - INTERIOR FINISHES</b>							<b>\$859,800</b>
<b>D10 CONVEYING SYSTEMS</b>							
<b>D1010 ELEVATOR</b>							
	SUBTOTAL					-	
<b>TOTAL - CONVEYING SYSTEMS</b>							
<b>D20 PLUMBING</b>							
<b>D20 PLUMBING, GENERALLY</b>							
	Plumbing package complete	34,000	gsf	10.00	340,000		
	SUBTOTAL					340,000	
<b>TOTAL - PLUMBING</b>							<b>\$340,000</b>
<b>D30 HVAC</b>							
<b>D30 HVAC, GENERALLY</b>							
	HVAC System	34,000	gsf	50.00	1,700,000		
	SUBTOTAL					1,700,000	
<b>TOTAL - HVAC</b>							<b>\$1,700,000</b>
<b>D40 FIRE PROTECTION</b>							
<b>D40 FIRE PROTECTION, GENERALLY</b>							
	<u>Fire Equipment</u>						
	Sprinkler system; complete	34,000	gsf	9.00	306,000		
	SUBTOTAL					306,000	
<b>TOTAL - FIRE PROTECTION</b>							<b>\$306,000</b>
<b>D50 ELECTRICAL</b>							
<b>D5010 ELECTRICAL SYSTEMS</b>							
<b>Gear &amp; Distribution</b>							
	Normal power distribution system						
	Panelboards/feeders	34,000	gsf	6.00	204,000		
	<u>Equipment Wiring</u>						
	Feeders + Electrical to equipment	34,000	gsf	7.00	238,000		
	SUBTOTAL					442,000	
<b>D5020 LIGHTING &amp; POWER</b>							
	Lighting, Controls + Power	34,000	gsf	12.00	408,000		
	SUBTOTAL					408,000	
<b>D5030 COMMUNICATION &amp; SECURITY SYSTEMS</b>							
	Telecommunications/PA + Clock	34,000	gsf	4.00	136,000		
	<u>Fire Alarm</u>	34,000	gsf	3.00	102,000		
	<u>Security System</u>	34,000	gsf	10.00	340,000		
	SUBTOTAL					578,000	
<b>D5040 OTHER ELECTRICAL SYSTEMS</b>							
	<u>Common Work Results for Electrical</u>						
	Lightning prevention	34,000	gsf	0.30	10,200		





Lexington High School  
Town of Lexington, MA

07-Oct-24

PSR Options Cost Estimate

GFA

34,000

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>G.0 FIELDHOUSE - ADD/RENOVATION OPTION 5</b>							
	Grounding	34,000	gsf	0.40	13,600		
	Misc. demolition work	34,000	gsf	0.25	8,500		
	Temp power and lights	34,000	gsf	1.20	40,800		
	Seismic restraints/Coordination/misc.	34,000	gsf	1.00	34,000		
	SUBTOTAL					107,100	
<b>TOTAL - ELECTRICAL</b>							<b>\$1,535,100</b>
<b>E10 EQUIPMENT</b>							
<b>E10 EQUIPMENT, GENERALLY</b>							
	AV Equipment	1	ls	100,000.00	100,000		
116600	GYM EQUIPMENT						
	Gym Equipment	1	ls	500,000.00	500,000		
126000	SEATING						
	Retractable bleachers	750	seat	250.00	187,500		
	SUBTOTAL					787,500	
<b>TOTAL - EQUIPMENT</b>							<b>\$787,500</b>
<b>E20 FURNISHINGS</b>							
<b>E2010 FIXED FURNISHINGS</b>							
122100	WINDOW TREATMENT						
	Window shades at exterior glazing; electric	4,606	sf	30.00	138,180		
	SUBTOTAL					138,180	
<b>E2020 MOVABLE FURNISHINGS</b>							
	All movable furnishings to be provided and installed by owner						
	SUBTOTAL					NIC	
<b>TOTAL - FURNISHINGS</b>							<b>\$138,180</b>
<b>F10 SPECIAL CONSTRUCTION</b>							
<b>F10 SPECIAL CONSTRUCTION</b>							
	SUBTOTAL					-	
<b>TOTAL - SPECIAL CONSTRUCTION</b>							
<b>F20 SELECTIVE BUILDING DEMOLITION</b>							
<b>F2010 BUILDING ELEMENTS DEMOLITION</b>							
	Remove existing closure	9,870	sf	10.00	98,700		
	Remove existing roofing	34,000	sf	5.00	170,000		
	Gut demolition	34,000	sf	10.00	340,000		
	SUBTOTAL					608,700	
<b>F2020 HAZARDOUS COMPONENTS ABATEMENT</b>							
	See main summary for HazMat allowance				See Summary		
	SUBTOTAL						
<b>TOTAL - SELECTIVE BUILDING DEMOLITION</b>							<b>\$608,700</b>
<b>SUBTOTAL</b>							<b>\$11,106,019</b>



PSR Options Cost Estimate

GFA

34,600

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**G.2 FIELDHOUSE - ADD/RENOVATION OPTION 6**

**GROSS FLOOR AREA CALCULATION**

Reno 34,000  
New Addition 600

<b>TOTAL GROSS FLOOR AREA (GFA)</b>	<b>34,600</b>	<b>sf</b>
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**A10 FOUNDATIONS**

**A1010 STANDARD FOUNDATIONS**

New foundations 600 sf 40.00 24,000  
SUBTOTAL 24,000

**A1020 SPECIAL FOUNDATIONS**

SUBTOTAL -

**A1030 LOWEST FLOOR CONSTRUCTION**

New SOG 600 sf 20.00 12,000  
SUBTOTAL 12,000

<b>TOTAL - FOUNDATIONS</b>	<b>\$36,000</b>
----------------------------	-----------------

**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>
--------------------------------------

**B10 SUPERSTRUCTURE**

**B1010 FLOOR CONSTRUCTION**

SUBTOTAL -

**B1020 ROOF CONSTRUCTION**

**051200 STRUCTURAL STEEL FRAMING**

Modify existing framing 1 ls 150,000.00 NR

**Decking**

3" galvanized metal deck, acoustic; assume all new 34,600 sf 12.00 NR

**078100 FIREPROOFING/FIRESTOPPING**

Fireproofing to columns, beams and deck; 1 hr - includes 34,600 sf 5.00 NR

Intumescent

SUBTOTAL -

<b>TOTAL - SUPERSTRUCTURE</b>
-------------------------------

**B20 EXTERIOR CLOSURE**

**B2010 EXTERIOR WALLS**

**Exterior Wall Area**

New headhouse for ductwork 1 ls 40,000.00 40,000

SUBTOTAL 40,000

**B2020 WINDOWS**

23,030 Total closure area

18,424 sf total area solid



PSR Options Cost Estimate

GFA

34,600

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**G.2 FIELDHOUSE - ADD/RENOVATION OPTION 6**

SUBTOTAL

-

**B2030 EXTERIOR DOORS**

Vestibule doors

1

ls

15,000.00

15,000

SUBTOTAL

15,000

**TOTAL - EXTERIOR CLOSURE**

**\$55,000**

**B30 ROOFING**

SUBTOTAL

-

**B3020 ROOF OPENINGS**

SUBTOTAL

-

**TOTAL - ROOFING**

**C10 INTERIOR CONSTRUCTION**

**C1010 PARTITIONS**

040001 MASONRY

Allowance for masonry partitions

1

ls

5,000.00

5,000

SUBTOTAL

5,000

**C1020 INTERIOR DOORS**

Doors, frames, hardware; complete

4

lvs

3,500.00

14,000

SUBTOTAL

14,000

**C1030 SPECIALTIES / MILLWORK**

101400 SIGNAGE

Room identification, directional & safety signage, building directory  
+ environmental graphics

1

ls

1,000.00

1,000

102800 TOILET ACCESSORIES

Toilet accessories/compartments

2

rms

1,500.00

3,000

SUBTOTAL

4,000

**TOTAL - INTERIOR CONSTRUCTION**

**\$23,000**

**C30 INTERIOR FINISHES**

**C3010 WALL FINISHES**

Wall finishes complete package

600

gsf

15.00

9,000

SUBTOTAL

9,000

**C3020 FLOOR FINISHES**

Flooring

600

sf

40.00

24,000

SUBTOTAL

24,000

**C3030 CEILING FINISHES**

Ceiling finishes; paint exposed structure

600

gsf

3.00

1,800

SUBTOTAL

1,800

**TOTAL - INTERIOR FINISHES**

**\$34,800**

**D10 CONVEYING SYSTEMS**

**D1010 ELEVATOR**

SUBTOTAL

-



PSR Options Cost Estimate

GFA

34,600

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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G.2 FIELDHOUSE - ADD/RENOVATION OPTION 6

**TOTAL - CONVEYING SYSTEMS**

**D20 PLUMBING**

**D20 PLUMBING, GENERALLY**

Plumbing package complete

600

gsf

40.00

24,000

SUBTOTAL

24,000

**TOTAL - PLUMBING**

**\$24,000**

**D30 HVAC**

**D30 HVAC, GENERALLY**

Replace existing 25,000 cfm

1

ls

750,000.00

750,000

Clean ductwork

34,000

gsf

1.00

34,000

New DDC controls

34,000

gsf

5.00

170,000

HVAC System at addition

600

gsf

50.00

30,000

SUBTOTAL

984,000

**TOTAL - HVAC**

**\$984,000**

**D40 FIRE PROTECTION**

**D40 FIRE PROTECTION, GENERALLY**

Fire Equipment

Sprinkler system; complete

600

gsf

9.00

5,400

SUBTOTAL

5,400

**TOTAL - FIRE PROTECTION**

**\$5,400**

**D50 ELECTRICAL**

**D5010 ELECTRICAL SYSTEMS**

Equipment Wiring

Feeders + Electrical to equipment

600

gsf

7.00

4,200

SUBTOTAL

4,200

**D5020 LIGHTING & POWER**

Lighting, Controls + Power

600

gsf

12.00

7,200

SUBTOTAL

7,200

**D5030 COMMUNICATION & SECURITY SYSTEMS**

Telecommunications/PA + Clock

600

gsf

4.00

2,400

Fire Alarm

600

gsf

3.00

1,800

Security System

600

gsf

10.00

6,000

SUBTOTAL

10,200

**D5040 OTHER ELECTRICAL SYSTEMS**

Common Work Results for Electrical

Misc. demolition work

600

gsf

0.25

150

Temp power and lights

600

gsf

1.20

720

Seismic restraints/Coordination/misc.

600

gsf

1.00

600

SUBTOTAL

1,470

**TOTAL - ELECTRICAL**

**\$23,070**

**E10 EQUIPMENT**

**E10 EQUIPMENT, GENERALLY**

SUBTOTAL

-

**TOTAL - EQUIPMENT**



PSR Options Cost Estimate

GFA

34,600

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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G.2 FIELDHOUSE - ADD/RENOVATION OPTION 6

**E20 FURNISHINGS**

**E2010 FIXED FURNISHINGS**

SUBTOTAL

-

**E2020 MOVABLE FURNISHINGS**

All movable furnishings to be provided and installed by owner

SUBTOTAL

NIC

**TOTAL - FURNISHINGS**

**F10 SPECIAL CONSTRUCTION**

**F10 SPECIAL CONSTRUCTION**

PEMB

600

gsf

100.00

60,000

SUBTOTAL

60,000

**TOTAL - SPECIAL CONSTRUCTION**

**\$60,000**

**F20 SELECTIVE BUILDING DEMOLITION**

**F2010 BUILDING ELEMENTS DEMOLITION**

SUBTOTAL

-

**F2020 HAZARDOUS COMPONENTS ABATEMENT**

See main summary for HazMat allowance

See Summary

SUBTOTAL

**TOTAL - SELECTIVE BUILDING DEMOLITION**

SUBTOTAL

**\$1,245,270**