

APPENDIX B

COST ESTIMATE PREPARED BY PM & C



PSR Estimate

**Northeast Metropolitan Regional
Vocational High School
PSR Design Options**

Wakefield, MA

PM&C LLC

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Prepared for:

PMA Consultants, LLC.

December 2, 2020



Northeast Metropolitan Regional Vocational High School
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	Construction Start	Gross Floor Area	\$/sf	Estimated Construction Cost
PSR OPTIONS				
OPTION B.2 ADDITION/RENOVATION - 1250 STUDENTS	Apr-23	314,923	\$598.20	\$188,388,320
OPTION B.2 ADDITION/RENOVATION - 1400 STUDENTS	Apr-23	343,349	\$591.59	\$203,121,514
OPTION B.2 ADDITION/RENOVATION - 1600 STUDENTS	Apr-23	363,974	\$587.43	\$213,810,813
OPTION B.2 ADDITION/RENOVATION - 1660 STUDENTS	Apr-23	393,327	\$582.28	\$229,024,524
OPTION B.2 ADDITION/RENOVATION - 1722 STUDENTS	Apr-23	391,798	\$581.50	\$227,831,139
OPTION C1 NEW BUILDING - 1250 STUDENTS	Apr-23	314,923	\$669.44	\$210,823,511
OPTION C1 NEW BUILDING - 1400 STUDENTS	Apr-23	343,349	\$657.00	\$225,579,493
OPTION C1 NEW BUILDING - 1600 STUDENTS	Apr-23	382,653	\$642.83	\$245,980,382
OPTION C1 NEW BUILDING - 1660 STUDENTS	Apr-23	393,327	\$639.48	\$251,523,153
OPTION C1 NEW BUILDING - 1722 STUDENTS	Apr-23	403,554	\$636.43	\$256,832,004
OPTION C2 NEW BUILDING - 1250 STUDENTS	Apr-23	314,923	\$643.91	\$202,782,954
OPTION C2 NEW BUILDING - 1400 STUDENTS	Apr-23	343,349	\$632.39	\$217,130,622
OPTION C2 NEW BUILDING - 1600 STUDENTS	Apr-23	382,653	\$617.73	\$236,376,300
OPTION C2 NEW BUILDING - 1660 STUDENTS	Apr-23	393,327	\$616.17	\$242,356,390
OPTION C2 NEW BUILDING - 1722 STUDENTS	Apr-23	403,554	\$613.35	\$247,518,339
OPTION C3 NEW BUILDING - 1250 STUDENTS	Apr-23	314,923	\$669.41	\$210,811,391
OPTION C3 NEW BUILDING - 1400 STUDENTS	Apr-23	343,349	\$654.46	\$224,708,443
OPTION C3 NEW BUILDING - 1600 STUDENTS	Apr-23	382,653	\$637.45	\$243,923,421
OPTION C3 NEW BUILDING - 1660 STUDENTS	Apr-23	393,327	\$633.42	\$249,141,951
OPTION C3 NEW BUILDING - 1722 STUDENTS	Apr-23	403,554	\$629.76	\$254,141,783

The costs presented in this report are ONLY for the comparison between the various options. These costs should not be represented as the final construction costs as the information they are based on is extremely preliminary and final construction costs may vary significantly from the PSR costs once the final design has been completed.



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This PSR cost estimate was produced from drawings, narratives and other documentation prepared by DRA Architects and their design team received November 1, 2020. Design and engineering changes occurring subsequent to the issue of these documents have not been incorporated in this estimate.

This estimate includes all direct construction costs, Construction managers overhead, fee and design contingency. Cost escalation assumes start dates indicated.

Bidding conditions are expected to be public bidding under Chapter 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:

- Land acquisition, feasibility, and financing costs
- All professional fees and insurance
- Site or existing conditions surveys investigations costs, including to determine subsoil conditions
- All Furnishings, Fixtures and Equipment (except as noted in this estimate)
- Items identified in the design as Not In Contract (NIC)
- Items identified in the design as by others
- Owner supplied and/or installed items as indicated in the estimate
- Utility company back charges, including work required off-site
- Work to City streets and sidewalks, (except as noted in this estimate)
- Construction contingency (GMP Contingency is included)
- Contaminated soils removal



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	Construction Start	Gross Floor Area	\$/sf	Estimated Construction Cost
OPTION B.2 ADDITION/RENOVATION - 1250 STUDENTS				
	Apr-23			
PHASING PREMIUM (Temp walls, logistical premiums, clean-up, mobilization costs etc.)	4.0%			\$4,680,039
NEW ADDITION		73,979	\$361.31	\$26,729,352
RENOVATION		239,144	\$303.69	\$72,626,332
PRECAST PARKING STRUCTURE AND PEDESTRIAN BRIDGE		68,000	\$68.68	\$4,670,000
MAINTENANCE BUILDING - PRE-ENGINEERED		1,800	\$180.00	\$324,000
CONCESSIONS/RESTROOM		1,600	\$400.00	\$640,000
SITEWORK				\$17,645,291
REMOVE HAZARDOUS MATERIALS (CDW Consultants, Inc. 4/14/20) ¹				\$1,919,675
SUB-TOTAL		314,923	\$410.37	\$129,234,689
ESCALATION TO MID-POINT, 3% Per annum	7.5%			\$9,692,602
DESIGN AND PRICING CONTINGENCY	15%			\$19,385,203
SUB-TOTAL		314,923	\$502.70	\$158,312,494
GENERAL CONDITIONS	40	MTHS	\$240,000	\$9,600,000
GENERAL REQUIREMENTS	4.00%			\$6,332,500
BONDS	1.25%			\$1,978,906
INSURANCE	1.40%			\$2,216,375
BUILDING PERMIT				By Owner
MODULARS				NR
CM FEE	2.5%			\$4,461,007
GMP CONTINGENCY	3.0%			\$5,487,038
TOTAL OF ALL CONSTRUCTION		314,923	\$598.20	\$188,388,320

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	Construction Start	Gross Floor Area	\$/sf	Estimated Construction Cost
OPTION B.2 ADDITION/RENOVATION - 1400 STUDENTS				
	Apr-23			
PHASING PREMIUM (Temp walls, logistical premiums, clean-up, mobilization costs etc.)	4.0%			\$5,090,863
NEW ADDITION		102,405	\$361.31	\$36,999,951
RENOVATION		239,144	\$303.69	\$72,626,332
PRECAST PARKING STRUCTURE AND PEDESTRIAN BRIDGE		68,000	\$68.68	\$4,670,240
MAINTENANCE BUILDING - PRE-ENGINEERED		1,800	\$180.00	\$324,000
CONCESSIONS/RESTROOM		1,600	\$400.00	\$640,000
SITEWORK				\$17,645,291
REMOVE HAZARDOUS MATERIALS (CDW Consultants, Inc. 4/14/20) ¹				\$1,919,675
SUB-TOTAL		343,349	\$407.50	\$139,916,352
ESCALATION TO MID-POINT, 3% Per annum	7.5%			\$10,493,726
DESIGN AND PRICING CONTINGENCY	15%			\$20,987,453
SUB-TOTAL		343,349	\$499.19	\$171,397,531
GENERAL CONDITIONS	40	MTHS	\$240,000	\$9,600,000
GENERAL REQUIREMENTS	4.00%			\$6,855,901
BONDS	1.25%			\$2,142,469
INSURANCE	1.40%			\$2,399,565
BUILDING PERMIT				By Owner
MODULARS				NR
CM FEE	2.5%			\$4,809,887
GMP CONTINGENCY	3.0%			\$5,916,161
TOTAL OF ALL CONSTRUCTION		343,349	\$591.59	\$203,121,514

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	Construction Start	Gross Floor Area	\$/sf	Estimated Construction Cost
OPTION B.2 ADDITION/RENOVATION - 1600 STUDENTS				
	Apr-23			
PHASING PREMIUM (Temp walls, logistical premiums, clean-up, mobilization costs etc.)	4.0%			\$5,388,933
NEW ADDITION		123,030	\$361.31	\$44,451,693
RENOVATION		239,144	\$303.69	\$72,626,332
PRECAST PARKING STRUCTURE AND PEDESTRIAN BRIDGE		68,000	\$68.68	\$4,670,240
MAINTENANCE BUILDING - PREENGINEERED		1,800	\$180.00	\$324,000
CONCESSIONS/RESTROOM		1,600	\$400.00	\$640,000
SITEWORK				\$17,645,291
REMOVE HAZARDOUS MATERIALS (CDW Consultants, Inc. 4/14/20) ¹				\$1,919,675
SUB-TOTAL		363,974	\$405.71	\$147,666,164
ESCALATION TO MID-POINT, 3% Per annum	7.5%			\$11,074,962
DESIGN AND PRICING CONTINGENCY	15%			\$22,149,925
SUB-TOTAL		363,974	\$496.99	\$180,891,051
GENERAL CONDITIONS	40	MTHS	\$240,000	\$9,600,000
GENERAL REQUIREMENTS	4.00%			\$7,235,642
BONDS	1.25%			\$2,261,138
INSURANCE	1.40%			\$2,532,475
BUILDING PERMIT				By Owner
MODULARS				NR
CM FEE	2.5%			\$5,063,008
GMP CONTINGENCY	3.0%			\$6,227,499
TOTAL OF ALL CONSTRUCTION		363,974	\$587.43	\$213,810,813

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	Construction Start	Gross Floor Area	\$/sf	Estimated Construction Cost
OPTION B.2 ADDITION/RENOVATION - 1660 STUDENTS				
	Apr-23			
PHASING PREMIUM (Temp walls, logistical premiums, clean-up, mobilization costs etc.)	4.0%			\$5,813,165
NEW ADDITION		152,383	\$361.31	\$55,057,502
RENOVATION		239,144	\$303.69	\$72,626,332
PRECAST PARKING STRUCTURE AND PEDESTRIAN BRIDGE		68,000	\$68.68	\$4,670,240
MAINTENANCE BUILDING - PRE-ENGINEERED		1,800	\$180.00	\$324,000
CONCESSIONS/RESTROOM		1,600	\$400.00	\$640,000
SITEWORK				\$17,645,291
REMOVE HAZARDOUS MATERIALS (CDW Consultants, Inc. 4/14/20) ¹				\$1,919,675
SUB-TOTAL		393,327	\$403.47	\$158,696,205
ESCALATION TO MID-POINT, 3% Per annum	7.5%			\$11,902,215
DESIGN AND PRICING CONTINGENCY	15%			\$23,804,431
SUB-TOTAL		393,327	\$494.25	\$194,402,851
GENERAL CONDITIONS	40	MTHS	\$240,000	\$9,600,000
GENERAL REQUIREMENTS	4.00%			\$7,776,114
BONDS	1.25%			\$2,430,036
INSURANCE	1.40%			\$2,721,640
BUILDING PERMIT				By Owner
MODULARS				NR
CM FEE	2.5%			\$5,423,266
GMP CONTINGENCY	3.0%			\$6,670,617
TOTAL OF ALL CONSTRUCTION		393,327	\$582.28	\$229,024,524

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	Construction Start	Gross Floor Area	\$/sf	Estimated Construction Cost
OPTION B.2 ADDITION/RENOVATION - 1722 STUDENTS				
	Apr-23			
PHASING PREMIUM (Temp walls, logistical premiums, clean-up, mobilization costs etc.)	4.0%			\$5,779,888
NEW ADDITION		150,854	\$359.58	\$54,244,804
RENOVATION		239,144	\$303.61	\$72,607,095
PRECAST PARKING STRUCTURE AND PEDESTRIAN BRIDGE		68,000	\$68.68	\$4,670,240
MAINTENANCE BUILDING - PRE-ENGINEERED		1,800	\$180.00	\$324,000
CONCESSIONS/RESTROOM		1,600	\$400.00	\$640,000
SITEWORK				\$17,645,291
REMOVE HAZARDOUS MATERIALS (CDW Consultants, Inc. 4/14/20) ¹				\$1,919,675
SUB-TOTAL		391,798	\$402.84	\$157,830,993
ESCALATION TO MID-POINT, 3% Per annum	7.5%			\$11,837,324
DESIGN AND PRICING CONTINGENCY	15%			\$23,674,649
SUB-TOTAL		391,798	\$493.48	\$193,342,966
GENERAL CONDITIONS	40	MTHS	\$240,000	\$9,600,000
GENERAL REQUIREMENTS	4.00%			\$7,733,719
BONDS	1.25%			\$2,416,787
INSURANCE	1.40%			\$2,706,802
BUILDING PERMIT				By Owner
MODULARS				NR
CM FEE	2.5%			\$5,395,007
GMP CONTINGENCY	3.0%			\$6,635,858
TOTAL OF ALL CONSTRUCTION		391,798	\$581.50	\$227,831,139

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	Construction Start	Gross Floor Area	\$/sf	Estimated Construction Cost
OPTION C1 NEW BUILDING - 1250 STUDENTS				
	Apr-23			
PHASING/LOGISTICS PREMIUM	2.0%			\$2,831,499
NEW BUILDING		313,123	\$372.59	\$116,666,499
DEMOLISH EXISTING BUILDINGS		239,144	\$8.00	\$1,913,152
MAINTENANCE BUILDING - PRE-ENGINEERED		1,800	\$180.00	\$324,000
CONCESSIONS/RESTROOM		1,600	\$400.00	\$640,000
SITEWORK				\$24,908,466
REMOVE HAZARDOUS MATERIALS (CDW Consultants, Inc. 4/14/20) ¹				\$1,919,675
SUB-TOTAL		314,923	\$473.78	\$149,203,291
ESCALATION TO MID-POINT, 3% Per annum	7.5%			\$11,190,247
DESIGN AND PRICING CONTINGENCY	15%			\$22,380,494
SUB-TOTAL		314,923	\$580.38	\$182,774,032
GENERAL CONDITIONS	28	MTHS	\$240,000	\$6,720,000
GENERAL REQUIREMENTS	4.00%			\$7,310,961
BONDS	1.25%			\$2,284,675
INSURANCE	1.40%			\$2,558,836
BUILDING PERMIT				By Owner
MODULARS				NR
CM FEE	2.5%			\$5,041,213
GMP CONTINGENCY	2.0%			\$4,133,794
TOTAL OF ALL CONSTRUCTION		314,923	\$669.44	\$210,823,511

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	Construction Start	Gross Floor Area	\$/sf	Estimated Construction Cost
OPTION C1 NEW BUILDING - 1400 STUDENTS				
	Apr-23			
PHASING/LOGISTICS PREMIUM	2.0%			\$3,043,324
NEW BUILDING		341,549	\$372.59	\$127,257,742
DEMOLISH EXISTING BUILDINGS		239,144	\$8.00	\$1,913,152
MAINTENANCE BUILDING - PRE-ENGINEERED		1,800	\$180.00	\$324,000
CONCESSIONS/RESTROOM		1,600	\$400.00	\$640,000
SITEWORK				\$24,908,466
REMOVE HAZARDOUS MATERIALS (CDW Consultants, Inc. 4/14/20) ¹				\$1,919,675
SUB-TOTAL		343,349	\$466.02	\$160,006,359
ESCALATION TO MID-POINT, 3% Per annum	7.5%			\$12,000,477
DESIGN AND PRICING CONTINGENCY	15%			\$24,000,954
SUB-TOTAL		343,349	\$570.87	\$196,007,790
GENERAL CONDITIONS	28	MTHS	\$240,000	\$6,720,000
GENERAL REQUIREMENTS	4.00%			\$7,840,312
BONDS	1.25%			\$2,450,097
INSURANCE	1.40%			\$2,744,109
BUILDING PERMIT				By Owner
MODULARS				NR
CM FEE	2.5%			\$5,394,058
GMP CONTINGENCY	2.0%			\$4,423,127
TOTAL OF ALL CONSTRUCTION		343,349	\$657.00	\$225,579,493

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	Construction Start	Gross Floor Area	\$/sf	Estimated Construction Cost
OPTION C1 NEW BUILDING - 1600 STUDENTS				
	Apr-23			
PHASING/LOGISTICS PREMIUM	2.0%			\$3,336,183
NEW BUILDING		380,853	\$372.59	\$141,900,669
DEMOLISH EXISTING BUILDINGS		239,144	\$8.00	\$1,913,152
MAINTENANCE BUILDING - PRE-ENGINEERED		1,800	\$180.00	\$324,000
CONCESSIONS/RESTROOM		1,600	\$400.00	\$640,000
SITEWORK				\$24,908,466
REMOVE HAZARDOUS MATERIALS (CDW Consultants, Inc. 4/14/20) ¹				\$1,919,675
SUB-TOTAL		382,653	\$457.18	\$174,942,145
ESCALATION TO MID-POINT, 3% Per annum	7.5%			\$13,120,661
DESIGN AND PRICING CONTINGENCY	15%			\$26,241,322
SUB-TOTAL		382,653	\$560.05	\$214,304,128
GENERAL CONDITIONS	28	MTHS	\$240,000	\$6,720,000
GENERAL REQUIREMENTS	4.00%			\$8,572,165
BONDS	1.25%			\$2,678,802
INSURANCE	1.40%			\$3,000,258
BUILDING PERMIT				By Owner
MODULARS				NR
CM FEE	2.5%			\$5,881,884
GMP CONTINGENCY	2.0%			\$4,823,145
TOTAL OF ALL CONSTRUCTION		382,653	\$642.83	\$245,980,382

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	Construction Start	Gross Floor Area	\$/sf	Estimated Construction Cost
OPTION C1 NEW BUILDING - 1660 STUDENTS				
	Apr-23			
PHASING/LOGISTICS PREMIUM	2.0%			\$3,415,750
NEW BUILDING		391,527	\$372.59	\$145,879,045
DEMOLISH EXISTING BUILDINGS		239,144	\$8.00	\$1,913,152
MAINTENANCE BUILDING - PRE-ENGINEERED		1,800	\$180.00	\$324,000
CONCESSIONS/RESTROOM		1,600	\$400.00	\$640,000
SITEWORK				\$24,908,466
REMOVE HAZARDOUS MATERIALS (CDW Consultants, Inc. 4/14/20) ¹				\$1,919,675
SUB-TOTAL		393,327	\$455.09	\$179,000,088
ESCALATION TO MID-POINT, 3% Per annum	7.5%			\$13,425,007
DESIGN AND PRICING CONTINGENCY	15%			\$26,850,013
SUB-TOTAL		393,327	\$557.49	\$219,275,108
GENERAL CONDITIONS	28	MTHS	\$240,000	\$6,720,000
GENERAL REQUIREMENTS	4.00%			\$8,771,004
BONDS	1.25%			\$2,740,939
INSURANCE	1.40%			\$3,069,852
BUILDING PERMIT				By Owner
MODULARS				NR
CM FEE	2.5%			\$6,014,423
GMP CONTINGENCY	2.0%			\$4,931,827
TOTAL OF ALL CONSTRUCTION		393,327	\$639.48	\$251,523,153

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	Construction Start	Gross Floor Area	\$/sf	Estimated Construction Cost
OPTION C1 NEW BUILDING - 1722 STUDENTS				
	Apr-23			
PHASING/LOGISTICS PREMIUM	2.0%			\$3,491,960
NEW BUILDING		401,754	\$372.59	\$149,689,523
DEMOLISH EXISTING BUILDINGS		239,144	\$8.00	\$1,913,152
MAINTENANCE BUILDING - PRE-ENGINEERED		1,800	\$180.00	\$324,000
CONCESSIONS/RESTROOM		1,600	\$400.00	\$640,000
SITEWORK				\$24,908,466
REMOVE HAZARDOUS MATERIALS (CDW Consultants, Inc. 4/14/20) ¹				\$1,919,675
SUB-TOTAL		403,554	\$453.19	\$182,886,776
ESCALATION TO MID-POINT, 3% Per annum	7.5%			\$13,716,508
DESIGN AND PRICING CONTINGENCY	15%			\$27,433,016
SUB-TOTAL		403,554	\$555.16	\$224,036,300
GENERAL CONDITIONS	28	MTHS	\$240,000	\$6,720,000
GENERAL REQUIREMENTS	4.00%			\$8,961,452
BONDS	1.25%			\$2,800,454
INSURANCE	1.40%			\$3,136,508
BUILDING PERMIT				By Owner
MODULARS				NR
CM FEE	2.5%			\$6,141,368
GMP CONTINGENCY	2.0%			\$5,035,922
TOTAL OF ALL CONSTRUCTION		403,554	\$636.43	\$256,832,004

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	Construction Start	Gross Floor Area	\$/sf	Estimated Construction Cost
OPTION C2 NEW BUILDING - 1250 STUDENTS				
	Apr-23			
PHASING/LOGISTICS PREMIUM	2.0%			\$2,716,809
NEW BUILDING		313,123	\$362.28	\$113,438,200
DEMOLISH EXISTING BUILDINGS		234,468	\$8.00	\$1,875,744
MAINTENANCE BUILDING - PRE-ENGINEERED		1,800	\$180.00	\$324,000
CONCESSIONS/RESTROOM		1,600	\$400.00	\$640,000
SITEWORK				\$22,402,255
REMOVE HAZARDOUS MATERIALS (CDW Consultants, Inc. 4/14/20) ¹				\$1,919,675
SUB-TOTAL		314,923	\$455.08	\$143,316,683
ESCALATION TO MID-POINT, 3% Per annum	7.5%			\$10,748,751
DESIGN AND PRICING CONTINGENCY	15%			\$21,497,502
SUB-TOTAL		314,923	\$557.48	\$175,562,936
GENERAL CONDITIONS	28	MTHS	\$240,000	\$6,720,000
GENERAL REQUIREMENTS	4.00%			\$7,022,517
BONDS	1.25%			\$2,194,537
INSURANCE	1.40%			\$2,457,881
BUILDING PERMIT				By Owner
MODULARS				NR
CM FEE	2.5%			\$4,848,947
GMP CONTINGENCY	2.0%			\$3,976,136
TOTAL OF ALL CONSTRUCTION		314,923	\$643.91	\$202,782,954

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	Construction Start	Gross Floor Area	\$/sf	Estimated Construction Cost
OPTION C2 NEW BUILDING - 1400 STUDENTS				
	Apr-23			
PHASING/LOGISTICS PREMIUM	2.0%			\$2,922,773
NEW BUILDING		341,549	\$362.28	\$123,736,372
DEMOLISH EXISTING BUILDINGS		234,468	\$8.00	\$1,875,744
MAINTENANCE BUILDING - PRE-ENGINEERED		1,800	\$180.00	\$324,000
CONCESSIONS/RESTROOM		1,600	\$400.00	\$640,000
SITEWORK				\$22,402,255
REMOVE HAZARDOUS MATERIALS (CDW Consultants, Inc. 4/14/20) ¹				\$1,919,675
SUB-TOTAL		343,349	\$448.00	\$153,820,819
ESCALATION TO MID-POINT, 3% Per annum	7.5%			\$11,536,561
DESIGN AND PRICING CONTINGENCY	15%			\$23,073,123
SUB-TOTAL		343,349	\$548.80	\$188,430,503
GENERAL CONDITIONS	28	MTHS	\$240,000	\$6,720,000
GENERAL REQUIREMENTS	4.00%			\$7,537,220
BONDS	1.25%			\$2,355,381
INSURANCE	1.40%			\$2,638,027
BUILDING PERMIT				By Owner
MODULARS				NR
CM FEE	2.5%			\$5,192,028
GMP CONTINGENCY	2.0%			\$4,257,463
TOTAL OF ALL CONSTRUCTION		343,349	\$632.39	\$217,130,622

¹ Testing and design services are not included in the HazMat removal costs



Northeast Metropolitan Regional Vocational High School
 PSR Design Options
 Wakefield, MA

02-Dec-20

PSR Estimate

	Construction Start	Gross Floor Area	\$/sf	Estimated Construction Cost
OPTION C2 NEW BUILDING - 1600 STUDENTS				
	Apr-23			
PHASING/LOGISTICS PREMIUM	2.0%			\$2,772,337
NEW BUILDING		380,853	\$362.28	\$137,976,848
DEMOLISH EXISTING BUILDINGS		234,468	\$8.00	\$1,875,744
MAINTENANCE BUILDING - PRE-ENGINEERED		1,800	\$180.00	\$324,000
CONCESSIONS/RESTROOM		1,600	\$400.00	\$640,000
SITEWORK				\$22,402,255
REMOVE HAZARDOUS MATERIALS (CDW Consultants, Inc. 4/14/20) ¹				\$1,919,675
SUB-TOTAL		382,653	\$438.81	\$167,910,859
ESCALATION TO MID-POINT, 3% Per annum	7.5%			\$12,593,314
DESIGN AND PRICING CONTINGENCY	15%			\$25,186,629
SUB-TOTAL		382,653	\$537.54	\$205,690,802
GENERAL CONDITIONS	28	MTHS	\$240,000	\$6,720,000
GENERAL REQUIREMENTS	4.00%			\$8,227,632
BONDS	1.25%			\$2,571,135
INSURANCE	1.40%			\$2,879,671
BUILDING PERMIT				By Owner
MODULARS				NR
CM FEE	2.5%			\$5,652,231
GMP CONTINGENCY	2.0%			\$4,634,829
TOTAL OF ALL CONSTRUCTION		382,653	\$617.73	\$236,376,300

¹ Testing and design services are not included in the HazMat removal costs



Northeast Metropolitan Regional Vocational High School
 PSR Design Options
 Wakefield, MA

02-Dec-20

PSR Estimate

	Construction Start	Gross Floor Area	\$/sf	Estimated Construction Cost
OPTION C2 NEW BUILDING - 1660 STUDENTS				
	Apr-23			
PHASING/LOGISTICS PREMIUM	2.0%			\$3,284,893
NEW BUILDING		391,527	\$362.28	\$141,842,402
DEMOLISH EXISTING BUILDINGS		234,468	\$8.00	\$1,875,744
MAINTENANCE BUILDING - PRE-ENGINEERED		1,800	\$180.00	\$324,000
CONCESSIONS/RESTROOM		1,600	\$400.00	\$640,000
SITEWORK				\$22,402,255
REMOVE HAZARDOUS MATERIALS (CDW Consultants, Inc. 4/14/20) ¹				\$1,919,675
SUB-TOTAL		393,327	\$438.03	\$172,288,969
ESCALATION TO MID-POINT, 3% Per annum	7.5%			\$12,921,673
DESIGN AND PRICING CONTINGENCY	15%			\$25,843,345
SUB-TOTAL		393,327	\$536.59	\$211,053,987
GENERAL CONDITIONS	28	MTHS	\$240,000	\$6,720,000
GENERAL REQUIREMENTS	4.00%			\$8,442,159
BONDS	1.25%			\$2,638,175
INSURANCE	1.40%			\$2,954,756
BUILDING PERMIT				By Owner
MODULARS				NR
CM FEE	2.5%			\$5,795,227
GMP CONTINGENCY	2.0%			\$4,752,086
TOTAL OF ALL CONSTRUCTION		393,327	\$616.17	\$242,356,390

¹ Testing and design services are not included in the HazMat removal costs



Northeast Metropolitan Regional Vocational High School
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PSR Estimate

	Construction Start	Gross Floor Area	\$/sf	Estimated Construction Cost
OPTION C2 NEW BUILDING - 1722 STUDENTS				
	Apr-23			
PHASING/LOGISTICS PREMIUM	2.0%			\$3,358,994
NEW BUILDING		401,754	\$362.28	\$145,547,439
DEMOLISH EXISTING BUILDINGS		234,468	\$8.00	\$1,875,744
MAINTENANCE BUILDING - PRE-ENGINEERED		1,800	\$180.00	\$324,000
CONCESSIONS/RESTROOM		1,600	\$400.00	\$640,000
SITEWORK				\$22,402,255
REMOVE HAZARDOUS MATERIALS (CDW Consultants, Inc. 4/14/20) ¹				\$1,919,675
SUB-TOTAL		403,554	\$436.29	\$176,068,107
ESCALATION TO MID-POINT, 3% Per annum	7.5%			\$13,205,108
DESIGN AND PRICING CONTINGENCY	15%			\$26,410,216
SUB-TOTAL		403,554	\$534.46	\$215,683,431
GENERAL CONDITIONS	28	MTHS	\$240,000	\$6,720,000
GENERAL REQUIREMENTS	4.00%			\$8,627,337
BONDS	1.25%			\$2,696,043
INSURANCE	1.40%			\$3,019,568
BUILDING PERMIT				By Owner
MODULARS				NR
CM FEE	2.5%			\$5,918,659
GMP CONTINGENCY	2.0%			\$4,853,301
TOTAL OF ALL CONSTRUCTION		403,554	\$613.35	\$247,518,339

¹ Testing and design services are not included in the HazMat removal costs



Northeast Metropolitan Regional Vocational High School
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 Wakefield, MA

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PSR Estimate

	Construction Start	Gross Floor Area	\$/sf	Estimated Construction Cost
OPTION C3 NEW BUILDING - 1250 STUDENTS				
	Apr-23			
NEW BUILDING		305,923	\$357.92	\$109,495,960
DEMOLISH EXISTING BUILDINGS		234,468	\$8.00	\$1,875,744
MAINTENANCE BUILDING - PRE-ENGINEERED		1,800	\$180.00	\$324,000
ATHLETIC SUPPORT/FIELD MAINTENANCE		7,200	\$400.00	\$2,880,000
CONCESSIONS/RESTROOM		1,600	\$400.00	\$640,000
SITEWORK				\$31,599,783
REMOVE HAZARDOUS MATERIALS (CDW Consultants, Inc. 4/14/20) ¹				\$1,919,675
SUB-TOTAL		314,923	\$472.29	\$148,735,162
ESCALATION TO MID-POINT, 3% Per annum	7.5%			\$11,155,137
DESIGN AND PRICING CONTINGENCY	15%			\$22,310,274
SUB-TOTAL		314,923	\$578.56	\$182,200,573
GENERAL CONDITIONS	28	MTHS	\$240,000	\$6,720,000
GENERAL CONDITIONS - EARLY ROCK OPERATION	8	MTHS	\$75,000	\$600,000
GENERAL REQUIREMENTS	4.00%			\$7,288,023
BONDS	1.25%			\$2,277,507
INSURANCE	1.40%			\$2,550,808
BUILDING PERMIT				By Owner
MODULARS				NR
CM FEE	2.5%			\$5,040,923
GMP CONTINGENCY	2.0%			\$4,133,557
TOTAL OF ALL CONSTRUCTION		314,923	\$669.41	\$210,811,391

¹ Testing and design services are not included in the HazMat removal costs



Northeast Metropolitan Regional Vocational High School
 PSR Design Options
 Wakefield, MA

02-Dec-20

PSR Estimate

	Construction Start	Gross Floor Area	\$/sf	Estimated Construction Cost
OPTION C3 NEW BUILDING - 1400 STUDENTS				
	Apr-23			
NEW BUILDING		334,349	\$357.92	\$119,670,194
DEMOLISH EXISTING BUILDINGS		234,468	\$8.00	\$1,875,744
MAINTENANCE BUILDING - PRE-ENGINEERED		1,800	\$180.00	\$324,000
ATHLETIC SUPPORT/FIELD MAINTENANCE		7,200	\$400.00	\$2,880,000
CONCESSIONS/RESTROOM		1,600	\$400.00	\$640,000
SITEWORK				\$31,599,783
REMOVE HAZARDOUS MATERIALS (CDW Consultants, Inc. 4/14/20) ¹				\$1,919,675
SUB-TOTAL		343,349	\$462.82	\$158,909,396
ESCALATION TO MID-POINT, 3% Per annum	7.5%			\$11,918,205
DESIGN AND PRICING CONTINGENCY	15%			\$23,836,409
SUB-TOTAL		343,349	\$566.96	\$194,664,010
GENERAL CONDITIONS	28	MTHS	\$240,000	\$6,720,000
GENERAL CONDITIONS - EARLY ROCK OPERATION	8	MTHS	\$75,000	\$600,000
GENERAL REQUIREMENTS	4.00%			\$7,786,560
BONDS	1.25%			\$2,433,300
INSURANCE	1.40%			\$2,725,296
BUILDING PERMIT				By Owner
MODULARS				NR
CM FEE	2.5%			\$5,373,229
GMP CONTINGENCY	2.0%			\$4,406,048
TOTAL OF ALL CONSTRUCTION		343,349	\$654.46	\$224,708,443

¹ Testing and design services are not included in the HazMat removal costs



Northeast Metropolitan Regional Vocational High School
 PSR Design Options
 Wakefield, MA

02-Dec-20

PSR Estimate

	Construction Start	Gross Floor Area	\$/sf	Estimated Construction Cost
OPTION C3 NEW BUILDING - 1600 STUDENTS				
	Apr-23			
NEW BUILDING		373,653	\$357.92	\$133,737,757
DEMOLISH EXISTING BUILDINGS		234,468	\$8.00	\$1,875,744
MAINTENANCE BUILDING - PRE-ENGINEERED		1,800	\$180.00	\$324,000
ATHLETIC SUPPORT/FIELD MAINTENANCE		7,200	\$400.00	\$2,880,000
CONCESSIONS/RESTROOM		1,600	\$400.00	\$640,000
SITEWORK				\$31,599,783
REMOVE HAZARDOUS MATERIALS (CDW Consultants, Inc. 4/14/20) ¹				\$1,919,675
SUB-TOTAL		382,653	\$452.05	\$172,976,959
ESCALATION TO MID-POINT, 3% Per annum	7.5%			\$12,973,272
DESIGN AND PRICING CONTINGENCY	15%			\$25,946,544
SUB-TOTAL		382,653	\$553.76	\$211,896,775
GENERAL CONDITIONS	28	MTHS	\$240,000	\$6,720,000
GENERAL CONDITIONS - EARLY ROCK OPERATION	8	MTHS	\$75,000	\$600,000
GENERAL REQUIREMENTS	4.00%			\$8,475,871
BONDS	1.25%			\$2,648,710
INSURANCE	1.40%			\$2,966,555
BUILDING PERMIT				By Owner
MODULARS				NR
CM FEE	2.5%			\$5,832,698
GMP CONTINGENCY	2.0%			\$4,782,812
TOTAL OF ALL CONSTRUCTION		382,653	\$637.45	\$243,923,421

¹ Testing and design services are not included in the HazMat removal costs



Northeast Metropolitan Regional Vocational High School
 PSR Design Options
 Wakefield, MA

02-Dec-20

PSR Estimate

	Construction Start	Gross Floor Area	\$/sf	Estimated Construction Cost
OPTION C3 NEW BUILDING - 1660 STUDENTS				
	Apr-23			
NEW BUILDING		384,327	\$357.92	\$137,558,320
DEMOLISH EXISTING BUILDINGS		234,468	\$8.00	\$1,875,744
MAINTENANCE BUILDING - PRE-ENGINEERED		1,800	\$180.00	\$324,000
ATHLETIC SUPPORT/FIELD MAINTENANCE		7,200	\$400.00	\$2,880,000
CONCESSIONS/RESTROOM		1,600	\$400.00	\$640,000
SITEWORK				\$31,599,783
REMOVE HAZARDOUS MATERIALS (CDW Consultants, Inc. 4/14/20) ¹				\$1,919,675
SUB-TOTAL		393,327	\$449.49	\$176,797,522
ESCALATION TO MID-POINT, 3% Per annum	7.5%			\$13,259,814
DESIGN AND PRICING CONTINGENCY	15%			\$26,519,628
SUB-TOTAL		393,327	\$550.63	\$216,576,964
GENERAL CONDITIONS	28	MTHS	\$240,000	\$6,720,000
GENERAL CONDITIONS - EARLY ROCK OPERATION	8	MTHS	\$75,000	\$600,000
GENERAL REQUIREMENTS	4.00%			\$8,663,079
BONDS	1.25%			\$2,707,212
INSURANCE	1.40%			\$3,032,077
BUILDING PERMIT				By Owner
MODULARS				NR
CM FEE	2.5%			\$5,957,483
GMP CONTINGENCY	2.0%			\$4,885,136
TOTAL OF ALL CONSTRUCTION		393,327	\$633.42	\$249,141,951

¹ Testing and design services are not included in the HazMat removal costs



Northeast Metropolitan Regional Vocational High School
 PSR Design Options
 Wakefield, MA

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PSR Estimate

	Construction Start	Gross Floor Area	\$/sf	Estimated Construction Cost
OPTION C3 NEW BUILDING - 1722 STUDENTS				
	Apr-23			
NEW BUILDING		394,554	\$357.92	\$141,218,768
DEMOLISH EXISTING BUILDINGS		234,468	\$8.00	\$1,875,744
MAINTENANCE BUILDING - PRE-ENGINEERED		1,800	\$180.00	\$324,000
ATHLETIC SUPPORT/FIELD MAINTENANCE		7,200	\$400.00	\$2,880,000
CONCESSIONS/RESTROOM		1,600	\$400.00	\$640,000
SITEWORK				\$31,599,783
REMOVE HAZARDOUS MATERIALS (CDW Consultants, Inc. 4/14/20) ¹				\$1,919,675
SUB-TOTAL		403,554	\$447.17	\$180,457,970
ESCALATION TO MID-POINT, 3% Per annum	7.5%			\$13,534,348
DESIGN AND PRICING CONTINGENCY	15%			\$27,068,696
SUB-TOTAL		403,554	\$547.79	\$221,061,014
GENERAL CONDITIONS	28	MTHS	\$240,000	\$6,720,000
GENERAL CONDITIONS - EARLY ROCK OPERATION	8	MTHS	\$75,000	\$600,000
GENERAL REQUIREMENTS	4.00%			\$8,842,441
BONDS	1.25%			\$2,763,263
INSURANCE	1.40%			\$3,094,854
BUILDING PERMIT				By Owner
MODULARS				NR
CM FEE	2.5%			\$6,077,039
GMP CONTINGENCY	2.0%			\$4,983,172
TOTAL OF ALL CONSTRUCTION		403,554	\$629.76	\$254,141,783

¹ Testing and design services are not included in the HazMat removal costs



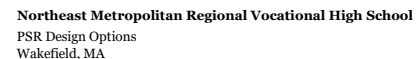
Northeast Metropolitan Regional Vocational High School
PSR Design Options
Wakefield, MA

02-Dec-20

PSR Estimate	GFA	363,974	GFA	389,998	GFA	380,853	GFA	380,853	GFA	373,653
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CONSTRUCTION COST SUMMARY

BUILDING SYSTEM	OPTION B2 - 1600 Students		OPTION B2 - 1722 Students		OPTION C1 - 1600 Students		OPTION C2 - 1600 Students		OPTION C3 - 1600 Students	
	SUB-TOTAL	\$/SF	SUB-TOTAL	\$/SF	SUB-TOTAL	\$/SF	SUB-TOTAL	\$/SF	SUB-TOTAL	\$/SF
ALL OPTIONS UNIFORMAT SUMMARY										
A10 FOUNDATIONS										
A1010 Standard Foundations	\$1,732,392	\$4.76	\$1,887,741	\$4.84	\$5,580,707	\$14.65	\$5,133,119	\$13.48	\$3,396,260	\$9.09
A1020 Special Foundations	\$0	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0	\$0.00
A1030 Lowest Floor	\$3,058,712	\$8.40	\$3,146,635	\$8.07	\$3,908,938	\$10.26	\$5,093,823	\$13.37	\$5,886,586	\$15.75
A20 BASEMENT CONSTRUCTION										
A2010 Basement Excavation	\$0	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0	\$0.00
A2020 Basement Walls	\$0	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0	\$0.00
B10 SUPERSTRUCTURE										
B1010 Upper Floor	\$5,151,038	\$14.15	\$5,966,093	\$15.30	\$11,852,882	\$31.12	\$9,474,445	\$24.88	\$11,345,570	\$30.36
B1020 Roof Construction	\$2,330,854	\$6.40	\$2,794,200	\$7.16	\$6,703,449	\$17.60	\$8,340,370	\$21.90	\$6,541,436	\$17.51
B20 EXTERIOR CLOSURE										
B2010 Exterior Walls	\$7,961,703	\$21.87	\$8,781,919	\$22.52	\$11,728,475	\$30.80	\$10,509,098	\$27.59	\$9,775,134	\$26.16
B2020 Windows	\$4,095,826	\$11.25	\$4,951,928	\$12.70	\$6,059,309	\$15.91	\$5,700,150	\$14.97	\$5,020,119	\$13.44
B2030 Exterior Doors	\$387,400	\$1.06	\$378,160	\$0.97	\$274,320	\$0.72	\$274,320	\$0.72	\$274,320	\$0.73
B30 ROOFING										
B3010 Roof Coverings	\$7,278,083	\$20.00	\$8,102,123	\$20.77	\$5,705,448	\$14.98	\$5,962,200	\$15.65	\$5,171,843	\$13.84
B3020 Roof Openings	\$12,500	\$0.03	\$12,500	\$0.03	\$941,000	\$2.47	\$941,000	\$2.47	\$941,000	\$2.52
C10 INTERIOR CONSTRUCTION										
C1010 Partitions	\$8,241,552	\$22.64	\$9,131,920	\$23.42	\$12,187,296	\$32.00	\$12,187,296	\$32.00	\$11,956,896	\$32.00
C1020 Interior Doors	\$2,173,044	\$5.97	\$2,339,988	\$6.00	\$2,285,118	\$6.00	\$2,285,118	\$6.00	\$2,241,918	\$6.00
C1030 Specialties/Millwork	\$2,716,305	\$7.46	\$2,924,985	\$7.50	\$2,856,398	\$7.50	\$2,856,398	\$7.50	\$2,802,398	\$7.50
C20 STAIRCASES										
C2010 Stair Construction	\$365,000	\$1.00	\$505,000	\$1.29	\$440,000	\$1.16	\$530,000	\$1.39	\$460,000	\$1.23
C2020 Stair Finishes	\$139,600	\$0.38	\$196,900	\$0.50	\$139,600	\$0.37	\$187,700	\$0.49	\$120,500	\$0.32
C30 INTERIOR FINISHES										
C3010 Wall Finishes	\$4,346,088	\$11.94	\$4,679,976	\$12.00	\$4,570,236	\$12.00	\$4,570,236	\$12.00	\$4,483,836	\$12.00
C3020 Floor Finishes	\$4,147,194	\$11.39	\$4,505,227	\$11.55	\$3,760,621	\$9.87	\$3,326,244	\$8.73	\$3,430,126	\$9.18
C3030 Ceiling Finishes	\$1,943,044	\$5.34	\$2,109,988	\$5.41	\$5,088,344	\$13.36	\$3,108,146	\$8.16	\$3,205,841	\$8.58



PSR Estimate	GFA	363,974	GFA	389,998	GFA	380,853	GFA	380,853	GFA	373,653
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CONSTRUCTION COST SUMMARY												
			OPTION B2 - 1600 Students		OPTION B2 - 1722 Students		OPTION C1 - 1600 Students		OPTION C2 - 1600 Students		OPTION C3 - 1600 Students	
BUILDING SYSTEM			SUB-TOTAL	\$/SF	SUB-TOTAL	\$/SF	SUB-TOTAL	\$/SF	SUB-TOTAL	\$/SF	SUB-TOTAL	\$/SF
ALL OPTIONS UNIFORMAT SUMMARY												
D10	CONVEYING SYSTEMS											
D1010	Elevator		\$670,000	\$1.84	\$550,000	\$1.41	\$780,000	\$2.05	\$480,000	\$1.26	\$600,000	\$1.61
D20	PLUMBING											
D20	Plumbing		\$7,181,965	\$19.73	\$7,724,533	\$19.81	\$7,426,634	\$19.50	\$7,426,634	\$19.50	\$7,286,234	\$19.50
D30	HVAC											
D30	HVAC		\$23,295,250	\$64.00	\$25,048,162	\$64.23	\$23,612,886	\$62.00	\$23,612,886	\$62.00	\$23,166,486	\$62.00
D40	FIRE PROTECTION											
D40	Fire Protection		\$2,533,489	\$6.96	\$2,714,345	\$6.96	\$2,475,545	\$6.50	\$2,475,545	\$6.50	\$2,428,745	\$6.50
D50	ELECTRICAL											
D5040	Electrical Systems		\$19,034,107	\$52.30	\$20,063,595	\$51.45	\$19,105,235	\$50.16	\$19,105,235	\$50.16	\$18,846,035	\$50.44
E10	EQUIPMENT											
E10	Equipment		\$2,558,500	\$7.03	\$2,558,500	\$6.56	\$2,558,500	\$6.72	\$2,558,500	\$6.72	\$2,558,500	\$6.85
E20	FURNISHINGS											
E2010	Fixed Furnishings		\$1,770,754	\$4.87	\$1,823,856	\$4.68	\$1,859,728	\$4.88	\$1,838,385	\$4.83	\$1,797,974	\$4.81
F20	HAZMAT REMOVALS											
F2010	Interior Demo		\$3,953,625	\$10.86	\$3,953,625	\$10.14	\$0		\$0		\$0	
F2020	Hazardous Abatement		\$0		\$0		\$0		\$0		\$0	
TOTAL DIRECT COST (Trade Costs)			\$117,078,025	\$321.67	\$126,851,899	\$325.26	\$141,900,669	\$372.59	\$137,976,848	\$362.28	\$133,737,757	\$357.92

ALL OPTIONS UNIFORMAT SUMMARY

D10 CONVEYING SYSTEMS

D1010 Elevator	\$670,000	\$1.84	\$550,000	\$1.41	\$780,000	\$2.05	\$480,000	\$1.26	\$600,000	\$1.61
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D20 PLUMBING

D20	Plumbing	\$7,181,965	\$19.73	\$7,724,533	\$19.81	\$7,426,634	\$19.50	\$7,426,634	\$19.50	\$7,286,234	\$19.50
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D30 HVAC

D30	HVAC	\$23,295,250	\$64.00	\$25,048,162	\$64.23	\$23,612,886	\$62.00	\$23,612,886	\$62.00	\$23,166,486	\$62.00
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D40 FIRE PROTECTION

D40	Fire Protection	\$2,533,489	\$6.96	\$2,714,345	\$6.96	\$2,475,545	\$6.50	\$2,475,545	\$6.50	\$2,428,745	\$6.50
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D50 ELECTRICAL

D5040	Electrical Systems	\$19,034,107	\$52.30	\$20,063,595	\$51.45	\$19,105,235	\$50.16	\$19,105,235	\$50.16	\$18,846,035	\$50.44
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E10 EQUIPMENT

E10	Equipment	\$2,558,500	\$7.03	\$2,558,500	\$6.56	\$2,558,500	\$6.72	\$2,558,500	\$6.72	\$2,558,500	\$6.85
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E20 FURNISHINGS

E2010	Fixed Furnishings	\$1,770,754	\$4.87	\$1,823,856	\$4.68	\$1,859,728	\$4.88	\$1,838,385	\$4.83	\$1,797,974	\$4.81
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F20 HAZMAT REMOVALS

F2010	Interior Demo	\$3,953,625	\$10.86	\$3,953,625	\$10.14	\$0	\$0	\$0
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F2020	Hazardous Abatement	\$0	\$0	\$0	\$0	\$0
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TOTAL DIRECT COST (Trade Costs)	\$117,078,025	\$321.67	\$126,851,899	\$325.26	\$141,900,669	\$372.59	\$137,976,848	\$362.28	\$133,737,757	\$357.92
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Northeast Metropolitan Regional Vocational High School

02-Dec-20

PSR Design Options
Wakefield, MA

PSR Estimate

GFA 239,144

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION B.2 1600 STUDENTS - RENOVATION

GROSS FLOOR AREA CALCULATION

Basement Level	30,979
Ground Floor	195,261
Second Floor	12,904

TOTAL GROSS FLOOR AREA (GFA)

239,144 sf

A10 FOUNDATIONS

A1010 STANDARD FOUNDATIONS

Allowance for miscellaneous foundation work; includes adding foundations for bracing	1	ls	300,000.00	300,000	
SUBTOTAL					300,000

A1020 SPECIAL FOUNDATIONS

No work in this section					-
SUBTOTAL					-

A1030 LOWEST FLOOR CONSTRUCTION

Cut and patch SOG for new shear wall foundations	3,750	sf	50.00	187,500	
Repair slab cracks	1	ls	50,000.00	50,000	
New equipment pads	1	ls	30,000.00	30,000	
Slab trenching and replacement at MEP work	195,261	sf	2.00	390,522	
Infill existing pool with geofoam, SOG	3,200	sf	40.00	128,000	
Premium for stepped auditorium seating/stage/ramps	7,000	sf	50.00	350,000	
Allow for floor levelling - LGMF	20,000	sf	30.00	600,000	
SUBTOTAL					1,736,022

TOTAL - FOUNDATIONS

\$2,036,022

B10 SUPERSTRUCTURE

B1010 FLOOR CONSTRUCTION

New shear walls	14,000	sf	40.00	560,000	
Clip all existing masonry walls to structure	239,144	gsf	6.00	1,434,864	
SUBTOTAL					1,994,864

B1020 ROOF CONSTRUCTION

Reinforce existing roof for new HVAC equipment	20	tn	5,000.00	100,000	
Snow loading, allow	10	tn	5,000.00	50,000	
SUBTOTAL					150,000

TOTAL - SUPERSTRUCTURE

\$2,144,864

B20 EXTERIOR CLOSURE

B2010 EXTERIOR WALLS

Exterior Wall Area - Solid	43,950	sf			
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042000 MASONRY

Clean all masonry/concrete	43,950	sf	8.00	351,600	
Repoint existing brick - 100%	37,700	sf	38.00	1,432,600	
Staging to exterior wall	61,070	sf	4.00	244,280	



Northeast Metropolitan Regional Vocational High School

02-Dec-20

PSR Design Options
Wakefield, MA

PSR Estimate

GFA

239,144

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION B.2 1600 STUDENTS - RENOVATION

58	070001	WATERPROOFING, DAMPPROOFING AND CAULKING					
59		Air barrier	43,950	sf	7.00	ETR	
60		Air barrier/flashing at windows	7,384	lf	6.25	46,150	
61							
62	072100	THERMAL INSULATION					
63		Insulation; 5" spray foam	43,950	sf	5.00	219,750	
64							
65	076400	CLADDING					
66		Roof equipment screen - allow				w/ addition	
67							
68	092900	GYPSUM BOARD ASSEMBLIES					
69		Interior face of wall					
70		Metal stud, 3-5/8"	43,950	sf	5.00	219,750	
71		ARGWB lining to interior face of stud backup	43,950	sf	4.00	175,800	
72		SUBTOTAL					2,689,930
73							

B2020 WINDOWS/CURTAINWALL

74		Exterior Wall Area - Glazed	17,120	sf			
75							
76							
77	061000	ROUGH CARPENTRY					
78		Wood blocking at openings	7,384	lf	12.00	88,608	
79							
80	070001	WATERPROOFING, DAMPPROOFING AND CAULKING					
81		Backer rod & double sealant	7,384	lf	9.00	66,456	
82							
83	080001	METAL WINDOWS					
84		Curtainwall, double glazed	1,280	sf	120.00	153,600	
85		Storefront, double glazed	6,870	sf	95.00	652,650	
86		Kalwall	8,970	sf	70.00	627,900	
87		Premium for operable openings	272	ea	400.00	108,800	
88		SUBTOTAL					1,698,014
89							

B2030 EXTERIOR DOORS

91		Glazed entrance doors including frame and hardware; double door	16	pr	9,000.00	144,000	
92		Glazed entrance doors including frame and hardware; single door	1	ea	4,500.00	4,500	
93		HM doors, frames and hardware- Double	5	ea	3,800.00	19,000	
94		HM doors, frames and hardware- single	15	ea	1,900.00	28,500	
95		Overhead doors	8	ea	12,000.00	96,000	
96		SUBTOTAL					292,000
97							

TOTAL - EXTERIOR CLOSURE

\$4,679,944

B30 ROOFING

B3010 ROOF COVERINGS

104		PVC membrane system	195,261	sf	22.00	4,295,742	
105		Roof edge at membrane roofing	4,490	lf	50.00	224,500	
106		Fascia at high roof, 24'	1,080	sf	80.00	86,400	
107		Miscellaneous flashings, accessories etc.	195,261	sf	1.25	244,076	
108		Perimeter blocking and sealants	195,261	sf	1.50	292,892	
109		Allowance for soffits/ overhangs	195,261	sf	3.00	585,783	
110		SUBTOTAL					5,729,393
111							



Northeast Metropolitan Regional Vocational High School

02-Dec-20

PSR Design Options
Wakefield, MA

PSR Estimate

GFA 239,144

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION B.2 1600 STUDENTS - RENOVATION

B3020 ROOF OPENINGS

No work in this section

SUBTOTAL

-

TOTAL - ROOFING

\$5,729,393

C10 INTERIOR CONSTRUCTION

C1010 PARTITIONS

Allowance to modify existing walls and add new walls where required

239,144

gsf

18.00

4,304,592

SUBTOTAL

4,304,592

C1020 INTERIOR DOORS

New doors, frames and hardware

239,144

sf

6.00

1,434,864

SUBTOTAL

1,434,864

C1030 SPECIALTIES / MILLWORK

Specialties

239,144

gsf

7.50

1,793,580

SUBTOTAL

1,793,580

TOTAL - INTERIOR CONSTRUCTION

\$7,533,036

C20 STAIRCASES

C2010 STAIR CONSTRUCTION

New stairs

1

flt

35,000.00

35,000

Allowance for ADA compliant railings

5

flt

10,000.00

50,000

SUBTOTAL

85,000

C2020 STAIR FINISHES

Allowance for new stair finishes

5

flt

5,000.00

25,000

SUBTOTAL

25,000

TOTAL - STAIRCASES

\$110,000

C30 INTERIOR FINISHES

C3010 WALL FINISHES

Painting/new wall finishes throughout

239,144

gsf

12.00

2,869,728

SUBTOTAL

2,869,728

C3020 FLOOR FINISHES

Allowance to prep floors for new finishes

239,144

sf

3.00

717,432

Carpet

7,665

sf

5.50

42,158

Rubber tile

34,255

sf

12.00

411,060

Linoleum tile

81,670

sf

6.00

490,020

Clean and seal concrete

54,250

sf

4.00

217,000

Ceramic tile

11,490

sf

24.00

275,760

Athletic performance wood

8,220

sf

18.00

147,960

Vented base

360

lf

8.00

2,880

Wood sprung floor

1,800

sf

22.00

39,600

Terrazzo tile, 24" x 24"

1,090

sf

36.00

39,240

Refinish wood stage

1,800

sf

8.00

14,400

Epoxy paint

12,990

sf

2.50

32,475

Resilient base

1

ls

30,000.00

30,000

SUBTOTAL

2,459,985



Northeast Metropolitan Regional Vocational High School

PSR Design Options
Wakefield, MA

02-Dec-20

PSR Estimate

GFA 239,144

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION B.2 1600 STUDENTS - RENOVATION

C3030 CEILING FINISHES

ACT, 2 x 2	169,144	sf	6.00	1,014,864	
Painted structure	70,000	sf	2.00	140,000	
SUBTOTAL					1,154,864

TOTAL - INTERIOR FINISHES

\$6,484,577

D10 CONVEYING SYSTEMS

New lift	1	ls	30,000.00	30,000	
Remove and replace elevator, 3 stop	2	ea	180,000.00	360,000	
Premium for existing building	1	ls	100,000.00	100,000	
SUBTOTAL					490,000

TOTAL - CONVEYING SYSTEMS

\$490,000

D20 PLUMBING

D20 PLUMBING, GENERALLY

New service entrance, new equipment, fixtures and piping. Phase construction and temporary conditions	239,144	sf	20.00	4,782,880	
SUBTOTAL					4,782,880

TOTAL - PLUMBING

\$4,782,880

D30 HVAC

D30 HVAC, GENERALLY

HVAC primarily all electric, air source heat pumps, VRF, and gas fired hot water boiler to pre-heat RTU's. Phased construction and temporary conditions	239,144	sf	65.00	15,544,360	
SUBTOTAL					15,544,360

TOTAL - HVAC

\$15,544,360

D40 FIRE PROTECTION

D40 FIRE PROTECTION, GENERALLY

Install new service loop, fire pump, partial demoliton,phased construction, temporary conditions and branch FP distribution	239,144	sf	7.25	1,733,794	
SUBTOTAL					1,733,794

TOTAL - FIRE PROTECTION

\$1,733,794

D50 ELECTRICAL

Normal power service & distribution 5000A	239,144	sf	5.00	1,195,720	
Generator gear and distribution 600KW	239,144	sf	3.50	837,004	
PV rough-in only					
Equipment wiring	239,144	sf	3.50	837,004	
Lighting, controls and circuitry	239,144	sf	10.00	2,391,440	
Branch devices and circuitry	239,144	sf	3.50	837,004	
Fire alarm including BDA	239,144	sf	3.50	837,004	



Northeast Metropolitan Regional Vocational High School

02-Dec-20

PSR Design Options
Wakefield, MA

PSR Estimate

GFA

239,144

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION B.2 1600 STUDENTS - RENOVATION

226	Technology system	239,144	sf	2.00	478,288		
227	Theater lighting systems	1	ls	200,000.00	200,000		
228	Security system	239,144	sf	1.00	239,144		
229	Miscellaneous electrical	239,144	sf	4.00	956,576		
230	Demolition and phased construction	239,144	sf	2.00	478,288		
231	SUBTOTAL					9,287,472	
232	Communications cabling and equipment allowance provided	1	ls	1,739,625.00	1,739,625		
233	A/V cabling allowance provided	1	ls	104,000.00	104,000		
234	IPTV and video pn demand allowance provided	1	ls	360,000.00	360,000		
235	Gym A/V allowance provided	1	ls	128,000.00	128,000		
236	Auditorium/stage A/V allowance provided	1	ls	148,000.00	148,000		
237	Cafeteria/Stage A/V allowance provided	1	ls	148,000.00	148,000		
238	Fitness Center A/V allowance provided	1	ls	15,500.00	15,500		
239	Weights A/V allowance provided	1	ls	15,500.00	15,500		
240	Speech Reinforcement allowance provided	1	ls	244,200.00	244,200		
241	Instructional A/V allowance provided	1	ls	650,000.00	650,000		
242	PA System allowance provided	1	ls	218,200.00	218,200		
243	Clock System allowance provided	1	ls	126,300.00	126,300		
244	SUBTOTAL					3,897,325	
245	Security system allowance provided	1	ls	1,297,200.00	1,297,200		
246	SUBTOTAL					1,297,200	

TOTAL - ELECTRICAL

\$14,481,997

E10 EQUIPMENT

E10 EQUIPMENT, GENERALLY

Tavares Design, 10.30.2020

257	Food service equipment	1	ls	825,000.00	825,000		
258	Basketball backstops	1	ls	27,000.00	27,000		
259	Stage curtains and rigging	1	ls	650,000.00	650,000		
260	Divider curtains	1	ls	32,000.00	32,000		
261	Gym wall padding	1	ls	25,000.00	25,000		
262	Telescoping bleachers	1	ls	215,000.00	215,000		
263	Automotive refinishing - Booths/Frame Machine	1	ls	325,000.00	325,000		
264	Automotive Tech - lifts	1	ls	160,000.00	160,000		
265	HVAC/Plumbing - Boilers/Furnaces/Split systems	1	ls	65,000.00	65,000		
266	Cosmetology - Wet stations/Manicure/Styling	1	ls	110,000.00	110,000		
267	SUBTOTAL					2,434,000	
268	Gymnasium dividing net; electrically operated	1	ls	30,000.00	30,000		
269	Volleyball net and standards	1	ls	5,000.00	5,000		
270	Wrestling mat lifter	1	ls	12,000.00	12,000		
271	Scoreboards and shot clock	1	ls	25,000.00	25,000		
272	Ceiling mounted batting cage	1	ls	2,500.00	2,500		
273	Culinary equipment - assume part of Food Service above					incl	
274	Residential appliances	1	ls	50,000.00	50,000		
275	Electrically operated projection screens					w/ AV	
276	SUBTOTAL					124,500	

TOTAL - EQUIPMENT

\$2,558,500



Northeast Metropolitan Regional Vocational High School

02-Dec-20

PSR Design Options
Wakefield, MA

PSR Estimate

GFA 239,144

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION B.2 1600 STUDENTS - RENOVATION

E20 FURNISHINGS

E2010 FIXED FURNISHINGS

123553 CASEWORK

Counters, base cabinets, tall storage in classrooms and other rooms - see ADD

incl

Entry mats & frames

200

sf

55.00

11,000

Window blinds

17,120

sf

7.00

119,840

Auditorium seating

750

seats

310.00

232,500

SUBTOTAL

363,340

E2020 MOVABLE FURNISHINGS

All movable furnishings to be provided and installed by owner

SUBTOTAL

NIC

TOTAL - FURNISHINGS

\$363,340

F10 SPECIAL CONSTRUCTION

F10 SPECIAL CONSTRUCTION

No work in this section

SUBTOTAL

-

TOTAL - SPECIAL CONSTRUCTION

F20 SELECTIVE BUILDING DEMOLITION

F2010 BUILDING ELEMENTS DEMOLITION

Slab trenching and replacement at MEP work and shear wall footings

3,750

sf

15.00

56,250

Exterior closure demolition at connections to new additions

1

ls

100,000.00

100,000

Remove existing roofing

195,261

sf

3.00

585,783

Interior demolition including removal of cut & capped MEP equipment and fixtures

239,144

gsf

8.00

1,913,152

Temporary enclosures/protection

239,144

sf

5.00

1,195,720

Remove exterior glazing

17,120

sf

6.00

102,720

SUBTOTAL

3,953,625

F2020 HAZARDOUS COMPONENTS ABATEMENT

See summary

SUBTOTAL

TOTAL - SELECTIVE BUILDING DEMOLITION

\$3,953,625

SUBTOTAL OPTION B2 RENOVATION 1600 Enrollment

\$72,626,332



PSR Estimate

GFA

123,030

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION B.2 1600 STUDENTS - ADDITION

GROSS FLOOR AREA CALCULATION

First Floor	47,560
Second Floor	37,663
Third Floor	37,807

TOTAL GROSS FLOOR AREA (GFA)

123,030 sf

A10 FOUNDATIONS

A1010 STANDARD FOUNDATIONS

033000 CONCRETE

Strip Footings	231	CY
Foundation Walls	410	CY
Spread Footings	614	CY
Piers	64	CY
Total Foundation Concrete	1,319	CY

Strip footings

Formwork	3,960	sf	14.00	55,440
Re-bar	19,800	lbs.	1.40	27,720
Concrete material	231	cy	130.00	30,030
Placing concrete	231	cy	100.00	23,100

Foundation walls

Formwork	15,840	sf	20.00	316,800
Re-bar	31,680	lbs.	1.40	44,352
Concrete material	410	cy	130.00	53,300
Placing concrete	410	cy	140.00	57,400
Form shelf	1,980	lf	10.00	19,800

Spread Footings: 11' x 11' x 2'

Formwork	2,464	sf	16.00	39,424
Re-bar	42,240	lbs.	1.40	59,136
Concrete material	264	cy	130.00	34,320
Placing concrete	264	cy	160.00	42,240
Set anchor bolts grout plates	28	ea	150.00	4,200

Spread Footings: 10' x 10' x 2'

Formwork	3,600	sf	16.00	57,600
Re-bar	56,000	lbs.	1.40	78,400
Concrete material	350	cy	130.00	45,500
Placing concrete	350	cy	160.00	56,000
Set anchor bolts grout plates	45	ea	150.00	6,750

Spread Footings: 8' x 8' x 2'

Formwork	1,920	sf	16.00	30,720
Re-bar	23,840	lbs.	1.40	33,376
Concrete material	149	cy	130.00	19,370
Placing concrete	149	cy	160.00	23,840
Set anchor bolts grout plates	30	ea	150.00	4,500

Piers/Pilasters

Formwork	2,472	sf	22.00	54,384
Re-bar	16,000	lbs.	1.40	22,400
Concrete material	64	cy	130.00	8,320
Placing concrete	64	cy	160.00	10,240
Thickened slab at interior load bearing walls	111	cy	350.00	38,850

070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Dampproofing at brick shelf	7,920	sf	3.00	NR
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072100 THERMAL INSULATION

Insulation	7,920	sf	3.00	23,760
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312000 EARTHWORK



PSR Estimate

GFA

123,030

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION B.2 1600 STUDENTS - ADDITIONStrip footings

Excavation

w/ lowest slab

Remove off site

w/ lowest slab

Backfill with selected material

w/ lowest slab

Spread footings

Excavation

w/ lowest slab

Remove off site

w/ lowest slab

Backfill with selected material

w/ lowest slab

Miscellaneous

Gravel fill beneath footings, 12"

w/ lowest slab

Perimeter drain

1,980

lf

22.00

43,560

Underslab drainage and waterproofing system

Not yet determined

Underslab E&B for plumbing

47,560

sf

1.00

47,560

Dewatering for foundation work

1

ls

20,000.00

20,000

SUBTOTAL

1,432,392

A1020 SPECIAL FOUNDATIONS

No work in this section

SUBTOTAL

-

A1030 LOWEST FLOOR CONSTRUCTIONDrilling/matting/blastingAt building addition footprint; includes no credit for selling
processed rock

10,969

cy

45.00

493,605

At parking garage footprint; includes no credit for selling
processed rock; allowance

19,815

cy

45.00

w/ site

Trench; for utility lines

1,500

cy

65.00

w/ site

Rock excavation/hauling to stockpile location

10,969

cy

7.00

76,783

Process and stockpile for reuse on site x1.65 (2" minus)

3,016

tns

7.00

w/ site

Process and stockpile for reuse within building footprints incl.
12" of structural below SOG x1.65 (2" minus)

15,083

tns

7.00

105,581

Pre split face; for exposed rock slopes; allowance

5,000

sf

9.78

w/ site

Building Earthwork

Fill below footprint to make up level- reuse processed rock

9,141

cy

12.00

109,692

New Slab on grade, 5" thick

47,560

sf

Rigid insulation, underslab

47,560

sf

2.25

107,010

Vapor barrier

47,560

sf

1.00

47,560

Compact existing sub-grade

47,560

sf

0.50

23,780

Mesh reinforcing 15% lap

54,694

sf

1.10

60,163

Concrete - 5" thick; 4,000 psi

777

cy

135.00

104,895

Placing concrete

777

cy

45.00

34,965

Finishing and curing concrete

47,560

sf

2.50

118,900

Control joints - saw cut

47,560

sf

0.10

4,756

Miscellaneous

Elevator pit, 24" mat foundation w/ 12" concrete wall

1

ea

35,000.00

35,000

SUBTOTAL

1,322,690

TOTAL - FOUNDATIONS**\$2,755,082****A20 BASEMENT CONSTRUCTION****A2010 BASEMENT EXCAVATION**

No Work in this section

SUBTOTAL

-

A2020 BASEMENT WALLS

No Work in this section

SUBTOTAL

-



PSR Estimate

GFA

123,030

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION B.2 1600 STUDENTS - ADDITION

TOTAL - BASEMENT CONSTRUCTION

B10 SUPERSTRUCTURE

B1010 FLOOR CONSTRUCTION

Floor Structure - Steel:

Steel beams and columns, 14#/SF

14.53 lbs/sf

894 tns

528

tns

3,800.00

2,006,400

Shear studs

15,094

ea

2.50

37,735

Floor Structure

3", 18ga Metal galvanized floor Deck

75,470

sf

4.00

301,880

WWF reinforcement

86,791

sf

1.10

95,470

Concrete fill to metal deck; total depth 5-1/4" light weight

1,284

cy

175.00

224,700

Place and finish concrete

75,470

sf

3.00

226,410

Rebar to decks

22,641

lbs

1.20

27,169

Misc. angles

75,470

sf

0.50

37,735

Miscellaneous

Fire proofing to columns and beams

75,470

sf

2.50

188,675

Fire stopping floors

1

ls

10,000.00

10,000

SUBTOTAL

3,156,174

B1020 ROOF CONSTRUCTION

Roof Structure - Steel:

Steel beams and columns at roof, 14#/SF

366

tns

3,800.00

1,390,800

Roof Structure

3" 20 Ga. galvanized metal roof deck

52,316

sf

3.50

183,106

Miscellaneous

Roof screen support

80

tns

5,000.00

400,000

Concrete at mechanical equipment

5,000

sf

10.00

50,000

Intumescent paint

NIC

Fire proofing to columns, beams and deck

52,316

sf

3.00

156,948

SUBTOTAL

2,180,854

TOTAL - SUPERSTRUCTURE

\$5,337,028

B20 EXTERIOR CLOSURE

B2010 EXTERIOR WALLS

Exterior Wall Area

60,676

sf

42,473

sf

042000 MASONRY

CMU veneer - large format, Arriscraft

6,068

sf

48.00

291,264

CMU back up

6,068

sf

30.00

182,040

Staging/Lifts to exterior wall

42,473

sf

4.00

169,892

055000 MISC. METALS

Sign at main entrance

1

ls

10,000.00

10,000

Misc. metals at masonry

12,136

sf

1.50

18,204

070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Air barrier

42,473

sf

7.50

318,548

Air barrier/flashing at windows

10,707

lf

6.25

66,919

Miscellaneous sealants to closure

42,473

sf

1.00

42,473

072100 THERMAL INSULATION

Insulation

42,473

sf

3.50

148,656



PSR Estimate

GFA

123,030

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION B.2 1600 STUDENTS - ADDITION

076400 CLADDING

Metal panel	14,562	sf	75.00	1,092,150
High performance concrete panel	21,843	sf	90.00	1,965,870
Soffit at overhang, including framing				NIC
Roof equipment screen - allow	10,000	sf	70.00	700,000

092900 GYPSUM BOARD ASSEMBLIES

6" CFMF backup	14,562	sf	12.00	174,744
Gypsum Sheathing	14,562	sf	2.75	40,046
Drywall lining to interior face of stud backup	14,562	sf	3.50	50,967

SUBTOTAL 5,271,773

B2020 WINDOWS

Exterior Glazed Area 18,202 sf

061000 ROUGH CARPENTRY

Wood blocking at openings 10,707 lf 12.00 128,484

070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Backer rod & double sealant 10,707 lf 9.00 96,363

080001 METAL WINDOWS

Curtainwall, double glazed	9,101	sf	120.00	1,092,120
Storefront, double glazed	9,101	sf	95.00	864,595
Sunshades; allow	1	ls	200,000.00	200,000

084500 INSULATED TRANSLUCENT PANELS

Translucent wall panels NR

089000 LOUVERS

Louvers 250 sf 65.00 16,250

SUBTOTAL 2,397,812

B2030 EXTERIOR DOORS

Glazed entrance doors including frame and hardware; double door 8 pr 9,000.00 72,000

Glazed entrance doors including frame and hardware; single door 2 ea 4,500.00 9,000

Overhead doors 1 ea 12,000.00 12,000

Backer rod & double sealant 200 lf 9.00 1,800

Wood blocking at openings 200 lf 3.00 600

SUBTOTAL 95,400

TOTAL - EXTERIOR CLOSURE

\$7,764,985

B30 ROOFING

B3010 ROOF COVERINGS

PVC membrane system	52,316	sf	22.00	1,150,952
Roof edge at membrane roofing	2,200	lf	50.00	110,000
Miscellaneous flashings, accessories etc.	52,316	sf	1.00	52,316
Perimeter blocking and sealants	52,316	sf	1.50	78,474
Allowance for soffits/ overhangs	52,316	sf	3.00	156,948
SUBTOTAL				1,548,690

B3020 ROOF OPENINGS

Skylights, allow 1 ls 10,000.00 10,000

Roof hatch 1 loc 2,500.00 2,500

SUBTOTAL 12,500



PSR Estimate

GFA 123,030

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION B.2 1600 STUDENTS - ADDITION

TOTAL - ROOFING	\$1,561,190
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C10 INTERIOR CONSTRUCTION

C1010 PARTITIONS

Miscellaneous partitions - glazing, CMU, GWB assemblies, etc.	123,030	gsf	32.00	3,936,960	
SUBTOTAL					3,936,960

C1020 INTERIOR DOORS

Doors; complete	123,030	gsf	6.00	738,180	
SUBTOTAL					738,180

C1030 SPECIALTIES / MILLWORK

Specialties	123,030	gsf	7.50	922,725	
SUBTOTAL					922,725

TOTAL - INTERIOR CONSTRUCTION	\$5,597,865
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C20 STAIRCASES

C2010 STAIR CONSTRUCTION

Feature stairs, 1-3	2	flt	60,000.00	120,000	
Egress stairs	4	flt	40,000.00	160,000	
SUBTOTAL					280,000

C2020 STAIR FINISHES

High performance coating to stairs including all railings etc.	6	flt	3,000.00	18,000	
Precast terrazzo treads and risers	560	lf	120.00	67,200	
Rubber tile at stairs - landings	600	sf	16.00	9,600	
Rubber tile at stairs - treads & risers	900	lft	22.00	19,800	
SUBTOTAL					114,600

TOTAL - STAIRCASES	\$394,600
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C30 INTERIOR FINISHES

C3010 WALL FINISHES

Wall finishes	123,030	sf	12.00	1,476,360	
SUBTOTAL					1,476,360

C3020 FLOOR FINISHES

Carpet	18,770	sf	5.50	103,235	
Rubber tile	16,697	sf	12.00	200,364	
Linoleum tile	33,400	sf	6.00	200,400	
Premium for acoustic cushioning at upper level classrooms	23,850	sf	3.00	71,550	
Seal concrete	5,330	sf	2.50	13,325	
Ceramic tile	3,840	sf	24.00	92,160	
Terrazzo tile, 24" x 24"	26,700	sf	36.00	961,200	
Epoxy paint	5,990	sf	2.50	14,975	
Resilient base	1	ls	30,000.00	30,000	
SUBTOTAL					1,687,209

C3030 CEILING FINISHES

ACT, 2 x 2	123,030	sf	6.00	738,180	
GWB soffits, allow	1	ls	50,000.00	50,000	
SUBTOTAL					788,180

TOTAL - INTERIOR FINISHES	\$3,951,749
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D10 CONVEYING SYSTEMS

D1010 ELEVATOR



PSR Estimate

GFA

123,030

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION B.2 1600 STUDENTS - ADDITION

Elevator; 3 stop	1	ea	180,000.00	180,000		
SUBTOTAL					180,000	
TOTAL - CONVEYING SYSTEMS						\$180,000
D20 PLUMBING						
D20 PLUMBING, GENERALLY						
Service entrance, equipment, fixtures and piping.	123,030	sf	19.50	2,399,085		
SUBTOTAL					2,399,085	
TOTAL - PLUMBING						\$2,399,085
D30 HVAC						
D30 HVAC, GENERALLY						
HVAC primarily all electric, air source heat pumps, VRF, and gas fired hot water boiler to pre-heat RTU's . Phased construction	123,030	sf	63.00	7,750,890		
SUBTOTAL					7,750,890	
TOTAL - HVAC						\$7,750,890
D40 FIRE PROTECTION						
D40 FIRE PROTECTION, GENERALLY						
Install new service loop, fire pump, phased construction, temporary conditions and branch FP distribution	123,030	sf	6.50	799,695		
SUBTOTAL					799,695	
TOTAL - FIRE PROTECTION						\$799,695
D50 ELECTRICAL						
Normal power service & distribution 5000A	123,030	sf	5.00	615,150		
Generator gear and distribution 600KW	123,030	sf	3.50	430,605		
PV rough-in only						
Equipment wiring	123,030	sf	3.50	430,605		
Lighting, controls and circuitry	123,030	sf	10.00	1,230,300		
Branch devices and circuitry	123,030	sf	3.50	430,605		
Fire alarm including BDA	123,030	sf	3.50	430,605		
Technology system	123,030	sf	2.00	246,060		
Security system	123,030	sf	1.00	123,030		
Miscellaneous electrical	123,030	sf	4.00	492,120		
Phased construction	123,030	sf	1.00	123,030		
SUBTOTAL					4,552,110	
TOTAL - ELECTRICAL						\$4,552,110
E10 EQUIPMENT						
E10 EQUIPMENT, GENERALLY						
Culinary equipment - assume part of Food Service - see Reno					incl	
SUBTOTAL						-
TOTAL - EQUIPMENT						
E20 FURNISHINGS						
E2010 FIXED FURNISHINGS						
Entry mats & frames - recessed with carpet/rubber strips	1,000	sf	55.00	55,000		
Window treatments	18,202	sf	7.00	127,414		



PSR Estimate

GFA 123,030

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION B.2 1600 STUDENTS - ADDITION

369 Fixed casework and Equipment, Tavares Design, 10.30.2020 1 ls 1,225,000.00 1,225,000
370 SUBTOTAL 1,407,414

E2020 MOVABLE FURNISHINGS

All movable furnishings to be provided and installed by owner

SUBTOTAL NIC

TOTAL - FURNISHINGS \$1,407,414

F10 SPECIAL CONSTRUCTION

F10 SPECIAL CONSTRUCTION

No items in this section

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 OPTION B2 ADDITION 1600 Enrollment \$44,451,693



Northeast Metropolitan Regional Vocational High School

PSR Design Options
Wakefield, MA

02-Dec-20

PSR Estimate

GFA 239,144

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION B.2 1722 STUDENTS - RENOVATION

GROSS FLOOR AREA CALCULATION

Basement Level	30,979
Ground Floor	195,261
Second Floor	12,904

TOTAL GROSS FLOOR AREA (GFA)

239,144 sf

A10 FOUNDATIONS

A1010 STANDARD FOUNDATIONS

Allowance for miscellaneous foundation work; includes adding foundations for bracing	1	ls	300,000.00	300,000	
SUBTOTAL					300,000

A1020 SPECIAL FOUNDATIONS

No work in this section					
SUBTOTAL					-

A1030 LOWEST FLOOR CONSTRUCTION

Cut and patch SOG for new shear wall foundations	3,750	sf	50.00	187,500	
Repair slab cracks	1	ls	50,000.00	50,000	
New equipment pads	1	ls	30,000.00	30,000	
Slab trenching and replacement at MEP work	195,261	sf	2.00	390,522	
Infill existing pool with geofoam, SOG	3,200	sf	40.00	128,000	
Premium for stepped auditorium seating/stage/ramps	7,000	sf	50.00	350,000	
Allow for floor levelling - LGMF	20,000	sf	30.00	600,000	
SUBTOTAL					1,736,022

TOTAL - FOUNDATIONS

\$2,036,022

B10 SUPERSTRUCTURE

B1010 FLOOR CONSTRUCTION

New shear walls	14,000	sf	40.00	560,000	
Clip all existing masonry walls to structure	239,144	gsf	6.00	1,434,864	
SUBTOTAL					1,994,864

B1020 ROOF CONSTRUCTION

Reinforce existing roof for new HVAC equipment	20	tn	5,000.00	100,000	
Snow loading, allow	10	tn	5,000.00	50,000	
SUBTOTAL					150,000

TOTAL - SUPERSTRUCTURE

\$2,144,864

B20 EXTERIOR CLOSURE

B2010 EXTERIOR WALLS

Exterior Wall Area - Solid	43,950	sf			
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042000 MASONRY

Clean all masonry/concrete	43,950	sf	8.00	351,600	
Repoint existing brick - 100%	37,700	sf	38.00	1,432,600	
Staging to exterior wall	61,070	sf	4.00	244,280	



Northeast Metropolitan Regional Vocational High School

02-Dec-20

PSR Design Options
Wakefield, MA

PSR Estimate

GFA

239,144

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION B.2 1722 STUDENTS - RENOVATION

070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Air barrier	43,950	sf	7.00	ETR	
Air barrier/flashing at windows	7,384	lf	6.25	46,150	

072100 THERMAL INSULATION

Insulation; 5" spray foam	43,950	sf	5.00	219,750	
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076400 CLADDING

Roof equipment screen - allow				w/ addition	
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092900 GYPSUM BOARD ASSEMBLIES

Interior face of wall					
Metal stud, 3-5/8"	43,950	sf	5.00	219,750	
ARGWB lining to interior face of stud backup	43,950	sf	4.00	175,800	
SUBTOTAL					2,689,930

B2020 WINDOWS/CURTAINWALL

Exterior Wall Area - Glazed	17,120	sf			
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061000 ROUGH CARPENTRY

Wood blocking at openings	7,384	lf	12.00	88,608	
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070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Backer rod & double sealant	7,384	lf	9.00	66,456	
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080001 METAL WINDOWS

Curtainwall, double glazed	1,280	sf	120.00	153,600	
Storefront, double glazed	6,870	sf	95.00	652,650	
Kalwall	8,970	sf	70.00	627,900	
Premium for operable openings	272	ea	400.00	108,800	
SUBTOTAL					1,698,014

B2030 EXTERIOR DOORS

Glazed entrance doors including frame and hardware; double door	16	pr	9,000.00	144,000	
Glazed entrance doors including frame and hardware; single door	1	ea	4,500.00	4,500	
HM doors, frames and hardware- Double	5	ea	3,800.00	19,000	
HM doors, frames and hardware- single	15	ea	1,900.00	28,500	
Overhead doors	8	ea	12,000.00	96,000	
SUBTOTAL					292,000

TOTAL - EXTERIOR CLOSURE

\$4,679,944

B30 ROOFING

B3010 ROOF COVERINGS

PVC membrane system	195,261	sf	22.00	4,295,742	
Roof edge at membrane roofing	4,490	lf	50.00	224,500	
Fascia at high roof, 24'	1,080	sf	80.00	86,400	
Miscellaneous flashings, accessories etc.	195,261	sf	1.25	244,076	
Perimeter blocking and sealants	195,261	sf	1.50	292,892	
Allowance for soffits/ overhangs	195,261	sf	3.00	585,783	
SUBTOTAL					5,729,393



Northeast Metropolitan Regional Vocational High School

02-Dec-20

PSR Design Options
Wakefield, MA

PSR Estimate

GFA 239,144

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION B.2 1722 STUDENTS - RENOVATION

B3020 ROOF OPENINGS

No work in this section

SUBTOTAL

-

TOTAL - ROOFING

\$5,729,393

C10 INTERIOR CONSTRUCTION

C1010 PARTITIONS

Allowance to modify existing walls and add new walls where required

239,144

gsf

18.00

4,304,592

SUBTOTAL

4,304,592

C1020 INTERIOR DOORS

New doors, frames and hardware

239,144

sf

6.00

1,434,864

SUBTOTAL

1,434,864

C1030 SPECIALTIES / MILLWORK

Specialties

239,144

gsf

7.50

1,793,580

SUBTOTAL

1,793,580

TOTAL - INTERIOR CONSTRUCTION

\$7,533,036

C20 STAIRCASES

C2010 STAIR CONSTRUCTION

New stairs

1

flt

35,000.00

35,000

Allowance for ADA compliant railings

5

flt

10,000.00

50,000

SUBTOTAL

85,000

C2020 STAIR FINISHES

Allowance for new stair finishes

5

flt

5,000.00

25,000

SUBTOTAL

25,000

TOTAL - STAIRCASES

\$110,000

C30 INTERIOR FINISHES

C3010 WALL FINISHES

Painting/new wall finishes throughout

239,144

gsf

12.00

2,869,728

SUBTOTAL

2,869,728

C3020 FLOOR FINISHES

Allowance to prep floors for new finishes

239,144

sf

3.00

717,432

Carpet

7,665

sf

5.50

42,158

Rubber tile

48,780

sf

12.00

585,360

Linoleum tile

81,670

sf

6.00

490,020

Clean and seal concrete

54,250

sf

4.00

217,000

Ceramic tile

1,740

sf

24.00

41,760

Athletic performance wood

8,220

sf

18.00

147,960

Vented base

360

lf

8.00

2,880

Wood sprung floor

1,800

sf

22.00

39,600

Terrazzo tile, 24" x 24"

1,090

sf

36.00

39,240

Refinish wood stage

1,800

sf

8.00

14,400

Poured epoxy with integral base

14,525

sf

16.00

232,400

Epoxy paint

8,215

sf

2.50

20,538

Resilient base

1

ls

30,000.00

30,000



Northeast Metropolitan Regional Vocational High School

PSR Design Options
Wakefield, MA

02-Dec-20

PSR Estimate

GFA 239,144

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION B.2 1722 STUDENTS - RENOVATION

SUBTOTAL 2,620,748

C3030 CEILING FINISHES

ACT, 2 x 2	169,144	sf	6.00	1,014,864	
Painted structure	70,000	sf	2.00	140,000	
SUBTOTAL					1,154,864

TOTAL - INTERIOR FINISHES \$6,645,340

D10 CONVEYING SYSTEMS

New lift	1	ls	30,000.00	30,000	
Remove and replace elevator, 3 stop	1	ls	180,000.00	180,000	
Premium for existing building	1	ls	100,000.00	100,000	
SUBTOTAL					310,000

TOTAL - CONVEYING SYSTEMS \$310,000

D20 PLUMBING

D20 PLUMBING, GENERALLY

New service entrance, new equipment, fixtures and piping. Phase construction and temporary conditions	239,144	sf	20.00	4,782,880	
SUBTOTAL					4,782,880

TOTAL - PLUMBING \$4,782,880

D30 HVAC

D30 HVAC, GENERALLY

HVAC primarily all electric, air source heat pumps, VRF, and gas fired hot water boiler to pre-heat RTU's. Phased construction and temporary conditions	239,144	sf	65.00	15,544,360	
SUBTOTAL					15,544,360

TOTAL - HVAC \$15,544,360

D40 FIRE PROTECTION

D40 FIRE PROTECTION, GENERALLY

Install new service loop, fire pump, partial demoliton,phased construction, temporary conditions and branch FP distribution	239,144	sf	7.25	1,733,794	
SUBTOTAL					1,733,794

TOTAL - FIRE PROTECTION \$1,733,794

D50 ELECTRICAL

Normal power service & distribution 5000A	239,144	sf	5.00	1,195,720	
Generator gear and distribution 600KW	239,144	sf	3.50	837,004	
PV rough-in only					
Equipment wiring	239,144	sf	3.50	837,004	
Lighting, controls and circuitry	239,144	sf	10.00	2,391,440	
Branch devices and circuitry	239,144	sf	3.50	837,004	



Northeast Metropolitan Regional Vocational High School

02-Dec-20

PSR Design Options
Wakefield, MA

PSR Estimate

GFA

239,144

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION B.2 1722 STUDENTS - RENOVATION

226	Fire alarm including BDA	239,144	sf	3.50	837,004		
227	Technology system	239,144	sf	2.00	478,288		
228	Theater lighting systems	1	ls	200,000.00	200,000		
229	Security system	239,144	sf	1.00	239,144		
230	Miscellaneous electrical	239,144	sf	4.00	956,576		
231	Demolition and phased construction	239,144	sf	2.00	478,288		
232	SUBTOTAL					9,287,472	
233	Communications cabling and equipment allowance provided	1	ls	1,739,625.00	1,739,625		
234	A/V cabling allowance provided	1	ls	104,000.00	104,000		
235	IPTV and video pn demand allowance provided	1	ls	360,000.00	360,000		
236	Gym A/V allowance provided	1	ls	128,000.00	128,000		
237	Auditorium/stage A/V allowance provided	1	ls	148,000.00	148,000		
238	Cafeteria/Stage A/V allowance provided	1	ls	148,000.00	148,000		
239	Fitness Center A/V allowance provided	1	ls	15,500.00	15,500		
240	Weights A/V allowance provided	1	ls	15,500.00	15,500		
241	Speech Reinforcement allowance provided	1	ls	244,200.00	244,200		
242	Instructional A/V allowance provided	1	ls	650,000.00	650,000		
243	PA System allowance provided	1	ls	218,200.00	218,200		
244	Clock System allowance provided	1	ls	126,300.00	126,300		
245	SUBTOTAL					3,897,325	
246	Security system allowance provided	1	ls	1,297,200.00	1,297,200		
247	SUBTOTAL					1,297,200	

TOTAL - ELECTRICAL

\$14,481,997

E10 EQUIPMENT

E10 EQUIPMENT, GENERALLY

Tavares Design, 10.30.2020

257	Food service equipment	1	ls	825,000.00	825,000		
258	Basketball backstops	1	ls	27,000.00	27,000		
259	Stage curtains and rigging	1	ls	650,000.00	650,000		
260	Divider curtains	1	ls	32,000.00	32,000		
261	Gym wall padding	1	ls	25,000.00	25,000		
262	Telescoping bleachers	1	ls	215,000.00	215,000		
263	Automotive refinishing - Booths/Frame Machine	1	ls	325,000.00	325,000		
264	Automotive Tech - lifts	1	ls	160,000.00	160,000		
265	HVAC/Plumbing - Boilers/Furnaces/Split systems	1	ls	65,000.00	65,000		
266	Cosmetology - Wet stations/Manicure/Styling	1	ls	110,000.00	110,000		
267	SUBTOTAL					2,434,000	
268	Gymnasium dividing net; electrically operated	1	ls	30,000.00	30,000		
269	Volleyball net and standards	1	ls	5,000.00	5,000		
270	Wrestling mat lifter	1	ls	12,000.00	12,000		
271	Scoreboards and shot clock	1	ls	25,000.00	25,000		
272	Ceiling mounted batting cage	1	ls	2,500.00	2,500		
273	Culinary equipment - assume part of Food Service above					incl	
274	Residential appliances	1	ls	50,000.00	50,000		
275	Electrically operated projection screens					w/ AV	
276	SUBTOTAL					124,500	

TOTAL - EQUIPMENT

\$2,558,500



Northeast Metropolitan Regional Vocational High School

02-Dec-20

PSR Design Options
Wakefield, MA

PSR Estimate

GFA 239,144

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION B.2 1722 STUDENTS - RENOVATION

E20 FURNISHINGS

E2010 FIXED FURNISHINGS

123553 CASEWORK

Counters, base cabinets, tall storage in classrooms and other rooms - see ADD

incl

Entry mats & frames

200

sf

55.00

11,000

Window blinds

17,120

sf

7.00

119,840

Auditorium seating

750

seats

310.00

232,500

SUBTOTAL

363,340

E2020 MOVABLE FURNISHINGS

All movable furnishings to be provided and installed by owner

SUBTOTAL

NIC

TOTAL - FURNISHINGS

\$363,340

F10 SPECIAL CONSTRUCTION

F10 SPECIAL CONSTRUCTION

No work in this section

SUBTOTAL

-

TOTAL - SPECIAL CONSTRUCTION

F20 SELECTIVE BUILDING DEMOLITION

F2010 BUILDING ELEMENTS DEMOLITION

Slab trenching and replacement at MEP work and shear wall footings

3,750

sf

15.00

56,250

Exterior closure demolition at connections to new additions

1

ls

100,000.00

100,000

Remove existing roofing

195,261

sf

3.00

585,783

Interior demolition including removal of cut & capped MEP equipment and fixtures

239,144

gsf

8.00

1,913,152

Temporary enclosures/protection

239,144

sf

5.00

1,195,720

Remove exterior glazing

17,120

sf

6.00

102,720

SUBTOTAL

3,953,625

F2020 HAZARDOUS COMPONENTS ABATEMENT

See summary

SUBTOTAL

TOTAL - SELECTIVE BUILDING DEMOLITION

\$3,953,625

SUBTOTAL OPTION B2 RENOVATION 1722 Enrollment

\$72,607,095



PSR Estimate

GFA

150,854

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION B.2 1722 STUDENTS - ADDITION

GROSS FLOOR AREA CALCULATION

First Floor	55,891
Second Floor	38,663
Third Floor	37,807
Fourth Floor	18,493

TOTAL GROSS FLOOR AREA (GFA)

150,854 sf

A10 FOUNDATIONS

A1010 STANDARD FOUNDATIONS

033000 CONCRETE

Strip Footings	257	CY
Foundation Walls	455	CY
Spread Footings	614	CY
Piers	73	CY
Total Foundation Concrete	1,399	CY

Strip footings

Formwork	4,400	sf	14.00	61,600
Re-bar	22,000	lbs.	1.40	30,800
Concrete material	257	cy	130.00	33,410
Placing concrete	257	cy	100.00	25,700

Foundation walls

Formwork	17,600	sf	20.00	352,000
Re-bar	35,200	lbs.	1.40	49,280
Concrete material	455	cy	130.00	59,150
Placing concrete	455	cy	140.00	63,700
Form shelf	2,200	lf	10.00	22,000

Spread Footings: 11' x 11' x 2'

Formwork	2,464	sf	16.00	39,424
Re-bar	42,240	lbs.	1.40	59,136
Concrete material	264	cy	130.00	34,320
Placing concrete	264	cy	160.00	42,240
Set anchor bolts grout plates	28	ea	150.00	4,200

Spread Footings: 10' x 10' x 2'

Formwork	3,600	sf	16.00	57,600
Re-bar	56,000	lbs.	1.40	78,400
Concrete material	350	cy	130.00	45,500
Placing concrete	350	cy	160.00	56,000
Set anchor bolts grout plates	45	ea	150.00	6,750

Spread Footings: 8' x 8' x 2'

Formwork	2,880	sf	16.00	46,080
Re-bar	35,840	lbs.	1.40	50,176
Concrete material	224	cy	130.00	29,120
Placing concrete	224	cy	160.00	35,840
Set anchor bolts grout plates	45	ea	150.00	6,750

Piers/Pilasters

Formwork	2,832	sf	22.00	62,304
Re-bar	18,250	lbs.	1.40	25,550
Concrete material	73	cy	130.00	9,490
Placing concrete	73	cy	160.00	11,680
Thickened slab at interior load bearing walls	111	cy	350.00	38,850

070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Dampproofing at brick shelf	8,800	sf	3.00	NR
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072100 THERMAL INSULATION

Insulation	8,800	sf	3.00	26,400
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312000 EARTHWORK



PSR Estimate

GFA

150,854

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION B.2 1722 STUDENTS - ADDITION

64	<u>Strip footings</u>						
65	Excavation					w/ lowest slab	
66	Remove off site					w/ lowest slab	
67	Backfill with selected material					w/ lowest slab	
68	<u>Spread footings</u>						
69	Excavation					w/ lowest slab	
70	Remove off site					w/ lowest slab	
71	Backfill with selected material					w/ lowest slab	
72	<u>Miscellaneous</u>						
73	Gravel fill beneath footings, 12"					w/ lowest slab	
74	Perimeter drain	2,200	lf	22.00	48,400		
75	Underslab drainage and waterproofing system				Not yet determined		
76	Underslab E&B for plumbing	55,891	sf	1.00	55,891		
77	Dewatering for foundation work	1	ls	20,000.00	20,000		
78	SUBTOTAL						1,587,741

A1020 SPECIAL FOUNDATIONS

No work in this section

SUBTOTAL

-

A1030 LOWEST FLOOR CONSTRUCTION

85	<u>Drilling/matting/blastng</u>						
86	At building addition footprint; includes no credit for selling processed rock	10,969	cy	45.00	493,605		
87	At parking garage footprint; includes no credit for selling processed rock; allowance	19,815	cy	45.00	w/ site		
88	Trench; for utility lines	1,500	cy	65.00	w/ site		
89	Rock excavation/hauling to stockpile location	10,969	cy	7.00	76,783		
90	Process and stockpile for reuse on site x1.65 (2" minus)	35,170	tns	7.00	w/ site		
91	Process and stockpile for reuse within building footprints incl. 12" of structural below SOG x1.65 (2" minus)	15,083	tns	7.00	105,581		
92	Pre split face; for exposed rock slopes; allowance	5,000	sf	9.78	w/ site		
93	<u>Building Earthwork</u>						
94	Fill below footprint to make up level- reuse processed rock	9,141	cy	12.00	109,692		
95	<u>New Slab on grade, 5" thick</u>	55,891	sf				
96	Rigid insulation, underslab	55,891	sf	2.25	125,755		
97	Vapor barrier	55,891	sf	1.00	55,891		
98	Compact existing sub-grade	55,891	sf	0.50	27,946		
99	Mesh reinforcing 15% lap	64,275	sf	1.10	70,703		
100	Concrete - 5" thick; 4,000 psi	913	cy	135.00	123,255		
101	Placing concrete	913	cy	45.00	41,085		
102	Finishing and curing concrete	55,891	sf	2.50	139,728		
103	Control joints - saw cut	55,891	sf	0.10	5,589		
104	<u>Miscellaneous</u>						
105	Elevator pit, 24" mat foundation w/ 12" concrete wall	1	ea	35,000.00	35,000		
106	SUBTOTAL						1,410,613

TOTAL - FOUNDATIONS**\$2,998,354****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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PSR Estimate

GFA 150,854

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION B.2 1722 STUDENTS - ADDITION

TOTAL - BASEMENT CONSTRUCTION

B10 SUPERSTRUCTURE

B1010 FLOOR CONSTRUCTION

Floor Structure - Steel:

Steel beams and columns, 14#/SF

Shear studs

Floor Structure

3", 18ga Metal galvanized floor Deck

WWF reinforcement

Concrete fill to metal deck; total depth 5-1/4" light weight

Place and finish concrete

Rebar to decks

Misc. angles

Miscellaneous

Fire proofing to columns and beams

Fire stopping floors

SUBTOTAL

B1020 ROOF CONSTRUCTION

Roof Structure - Steel:

Steel beams and columns at roof, 14#/SF

Roof Structure

3" 20 Ga. galvanized metal roof deck

Miscellaneous

Roof screen support

Concrete at mechanical equipment/ vegetated roof

Intumescent paint

Fire proofing to columns, beams and deck

SUBTOTAL

TOTAL - SUPERSTRUCTURE

\$6,615,429

B20 EXTERIOR CLOSURE

B2010 EXTERIOR WALLS

Exterior Wall Area

042000 MASONRY

CMU veneer - large format, Arriscraft

CMU back up

Staging/Lifts to exterior wall

055000 MISC. METALS

Sign at main entrance

Misc. metals at masonry

070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Air barrier

Air barrier/flashing at windows

Miscellaneous sealants to closure

072100 THERMAL INSULATION

Insulation

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PSR Estimate

GFA

150,854

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION B.2 1722 STUDENTS - ADDITION

178							
179	076400	CLADDING					
180		Metal panel	15,169	sf	75.00	1,137,675	
181		High performance concrete panel	27,304	sf	90.00	2,457,360	
182		Soffit at overhang, including framing				NIC	
183		Roof equipment screen - allow	10,000	sf	70.00	700,000	
184							
185	092900	GYPSUM BOARD ASSEMBLIES					
186		6" CFMF backup	15,169	sf	12.00	182,028	
187		Gypsum Sheathing	15,169	sf	2.75	41,715	
188		Drywall lining to interior face of stud backup	15,169	sf	3.50	53,092	
189							
190		SUBTOTAL				6,091,989	
191							
192	B2020	WINDOWS					
193		Exterior Glazed Area	25,788	sf			
194							
195	061000	ROUGH CARPENTRY					
196		Wood blocking at openings	15,169	lf	12.00	182,028	
197							
198	070001	WATERPROOFING, DAMPPROOFING AND CAULKING					
199		Backer rod & double sealant	15,169	lf	9.00	136,521	
200							
201	080001	METAL WINDOWS					
202		Curtainwall, double glazed	11,377	sf	120.00	1,365,240	
203		Storefront, double glazed	11,377	sf	95.00	1,080,815	
204		Sunshades; allow	1	ls	200,000.00	200,000	
205							
206	084500	INSULATED TRANSLUCENT PANELS					
207		Translucent wall panels	3,034	sf	90.00	273,060	
208							
209	089000	LOUVERS					
210		Louvers	250	sf	65.00	16,250	
211		SUBTOTAL				3,253,914	
212							
213	B2030	EXTERIOR DOORS					
214		Glazed entrance doors including frame and hardware; double door	7	pr	9,000.00	63,000	
215		Glazed entrance doors including frame and hardware; single door	2	ea	4,500.00	9,000	
216		Overhead doors	1	ea	12,000.00	12,000	
217		Backer rod & double sealant	180	lf	9.00	1,620	
218		Wood blocking at openings	180	lf	3.00	540	
219		SUBTOTAL				86,160	

TOTAL - EXTERIOR CLOSURE

\$9,432,063

B30 ROOFING

B3010 ROOF COVERINGS

227		PVC membrane system	61,480	sf	22.00	1,352,560	
228		Roof edge at membrane roofing	2,400	lf	50.00	120,000	
229		Miscellaneous flashings, accessories etc.	61,480	sf	1.00	61,480	
230		Perimeter blocking and sealants	61,480	sf	1.50	92,220	
231		Allowance for soffits/ overhangs	61,480	sf	3.00	184,440	
232		Premium for vegetated roof/patio	16,058	sf	35.00	562,030	
233		SUBTOTAL				2,372,730	

B3020 ROOF OPENINGS

236		Skylights, allow	1	ls	10,000.00	10,000	
237		Roof hatch	1	loc	2,500.00	2,500	



PSR Estimate

GFA 150,854

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION B.2 1722 STUDENTS - ADDITION

SUBTOTAL 12,500

TOTAL - ROOFING

\$2,385,230

C10 INTERIOR CONSTRUCTION

C1010 PARTITIONS

Miscellaneous partitions - glazing, CMU, GWB assemblies, etc. 150,854 gsf 32.00 4,827,328
SUBTOTAL 4,827,328

C1020 INTERIOR DOORS

Doors; complete 150,854 gsf 6.00 905,124
SUBTOTAL 905,124

C1030 SPECIALTIES / MILLWORK

Specialties 150,854 gsf 7.50 1,131,405
SUBTOTAL 1,131,405

TOTAL - INTERIOR CONSTRUCTION

\$6,863,857

C20 STAIRCASES

C2010 STAIR CONSTRUCTION

Feature stairs, 1-3 3 flt 60,000.00 180,000
Egress stairs 6 flt 40,000.00 240,000
SUBTOTAL 420,000

C2020 STAIR FINISHES

High performance coating to stairs including all railings etc. 9 flt 3,000.00 27,000
Precast terrazzo treads and risers 840 lf 120.00 100,800
Rubber tile at stairs - landings 900 sf 16.00 14,400
Rubber tile at stairs - treads & risers 1,350 lft 22.00 29,700
SUBTOTAL 171,900

TOTAL - STAIRCASES

\$591,900

C30 INTERIOR FINISHES

C3010 WALL FINISHES

Wall finishes 150,854 sf 12.00 1,810,248
SUBTOTAL 1,810,248

C3020 FLOOR FINISHES

Carpet 19,950 sf 5.50 109,725
Linoleum tile 49,354 sf 6.00 296,124
Premium for acoustic cushioning at upper level classrooms 30,060 sf 3.00 90,180
Seal concrete 1,580 sf 2.50 3,950
Ceramic tile 4,600 sf 24.00 110,400
Terrazzo tile, 24" x 24" 30,225 sf 36.00 1,088,100
Poured epoxy with integral base 9,750 sf 16.00 156,000
Resilient base 1 ls 30,000.00 30,000
SUBTOTAL 1,884,479

C3030 CEILING FINISHES

ACT, 2 x 2 150,854 sf 6.00 905,124
GWB soffits, allow 1 ls 50,000.00 50,000
SUBTOTAL 955,124

TOTAL - INTERIOR FINISHES

\$4,649,851

D10 CONVEYING SYSTEMS

D1010 ELEVATOR



PSR Estimate

GFA

150,854

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION B.2 1722 STUDENTS - ADDITION

Elevator; 4 stop

1

ea

240,000.00

240,000

SUBTOTAL

240,000

TOTAL - CONVEYING SYSTEMS**\$240,000****D20 PLUMBING****D20 PLUMBING, GENERALLY**

Service entrance, equipment, fixtures and piping.

150,854

sf

19.50

2,941,653

SUBTOTAL

2,941,653

TOTAL - PLUMBING**\$2,941,653****D30 HVAC****D30 HVAC, GENERALLY**

HVAC primarily all electric, air source heat pumps, VRF, and gas fired hot water boiler to pre-heat RTU's . Phased construction

150,854

sf

63.00

9,503,802

SUBTOTAL

9,503,802

TOTAL - HVAC**\$9,503,802****D40 FIRE PROTECTION****D40 FIRE PROTECTION, GENERALLY**

Install new service loop, fire pump, phased construction, temporary conditions and branch FP distribution

150,854

sf

6.50

980,551

SUBTOTAL

980,551

TOTAL - FIRE PROTECTION**\$980,551****D50 ELECTRICAL**

Normal power service & distribution 5000A

150,854

sf

5.00

754,270

Generator gear and distribution 600KW

150,854

sf

3.50

527,989

PV rough-in only

Equipment wiring

150,854

sf

3.50

527,989

Lighting, controls and circuitry

150,854

sf

10.00

1,508,540

Branch devices and circuitry

150,854

sf

3.50

527,989

Fire alarm including BDA

150,854

sf

3.50

527,989

Technology system

150,854

sf

2.00

301,708

Security system

150,854

sf

1.00

150,854

Miscellaneous electrical

150,854

sf

4.00

603,416

Phased construction

150,854

sf

1.00

150,854

SUBTOTAL

5,581,598

TOTAL - ELECTRICAL**\$5,581,598****E10 EQUIPMENT****E10 EQUIPMENT, GENERALLY**

Culinary equipment - assume part of Food Service - see Reno

incl

SUBTOTAL

-

TOTAL - EQUIPMENT**E20 FURNISHINGS****E2010 FIXED FURNISHINGS**

Entry mats & frames - recessed with carpet/rubber strips

1,000

sf

55.00

55,000

Window treatments

25,788

sf

7.00

180,516



PSR Estimate

GFA 150,854

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION B.2 1722 STUDENTS - ADDITION

370 Fixed casework and Equipment, Tavares Design, 10.30.2020 1 ls 1,225,000.00 1,225,000
371 SUBTOTAL 1,460,516
372

E2020 MOVABLE FURNISHINGS

373 All movable furnishings to be provided and installed by owner
374

375 SUBTOTAL NIC
376

377 **TOTAL - FURNISHINGS \$1,460,516**
378

F10 SPECIAL CONSTRUCTION

F10 SPECIAL CONSTRUCTION

382 No items in this section
383

384 SUBTOTAL
385

386 **TOTAL - SPECIAL CONSTRUCTION**
387

F20 SELECTIVE BUILDING DEMOLITION

F2010 BUILDING ELEMENTS DEMOLITION

391 No items in this section
392

393 SUBTOTAL
394

F2020 HAZARDOUS COMPONENTS ABATEMENT

395 See main summary for HazMat allowance
396

See Summary

397 SUBTOTAL
398

399 **TOTAL - SELECTIVE BUILDING DEMOLITION**

SUBTOTAL OPTION B2 ADDITION 1722 Enrollment \$54,244,804



PSR Estimate

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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SITEWORK OPTION B.2

G SITEWORK

G10 SITE PREPARATION & DEMOLITION

Site construction fence/barricades	6,710	lf	16.00	107,360	
Site construction fence gates and construction entrance	2	ea	10,000.00	20,000	
Police details/road closures/phasing for utility work	1	ls	125,000.00	125,000	
Pavement/curbing removal- site	276,600	sf	1.25	345,750	
Pavement/curbing removal- utility work in road	40,300	sf	1.25	50,375	
Clear trees, remove all stumps etc. - allow	1	ls	25,000.00	25,000	
Construction laydown area	1	ls	10,000.00	10,000	
Miscellaneous demolition including utilities	1	ls	100,000.00	100,000	
SUBTOTAL					783,485

Earthwork

Pre-blast survey	1	ls	100,000.00	100,000	
<u>Topsoil handling</u>					
Strip topsoil and forest organics and remove off-site; allow	1,500	cy	16.00	24,000	
<u>Drilling/matting/blasting</u>					
At building addition footprint; includes no credit for selling processed rock	10,969	cy	45.00	w/ building	
At parking garage footprint; includes no credit for selling processed rock; allowance	19,815	cy	45.00	891,675	
Trench; for utility lines	1,500	cy	65.00	97,500	
Rock excavation/hauling to stockpile location	21,315	cy	7.00	149,205	
Process and stockpile for reuse on site x1.65 (2" minus)	35,170	tns	7.00	246,190	
Process and stockpile for reuse within building footprints incl. 12" of structural below SOG x1.65 (2" minus)	15,083	tns	7.00	w/ building	
Pre split face; for exposed rock slopes; allowance	5,000	sf	9.78	48,900	
<u>Building Earthwork</u>					
Fill below footprint to make up level- reuse processed rock	9,141	cy	12.00	w/ building	
<u>Site Earthwork</u>					
Cut/Fill allowance	5,000	cy	24.00	120,000	
Groundwater management/ control measures	2	mths	20,000.00	40,000	
Fine grading	63,161	sy	2.25	142,112	

Hazardous Waste Remediation

Remove existing underground fuel storage tanks					assume not required
Dispose/treat contaminated soils					assume not required

Erosion Control

Silt fence/erosion control, wash bays, stock piles	6,710	lf	12.00	80,520	
Inlet protection; allow	20	ea	250.00	5,000	
Slope protection; allow	1	ls	25,000.00	25,000	
Tree protection; allow	500	lf	10.00	5,000	
Wheel wash stations	1	ls	15,000.00	15,000	
Silt fence maintenance and monitoring	1	ls	30,000.00	30,000	
SUBTOTAL					2,020,102

G20 SITE IMPROVEMENTS

<u>Asphalt Paving; parking lot and roadway</u>	253,400	sf			
gravel base; 12" thick	9,385	cy	40.00	375,400	
asphalt; 4" thick	6,272	tns	120.00	752,640	
<u>Service road - Remove, Grind and Repave</u>	3,610	sf			
gravel base; 12" thick	134	cy	40.00	5,360	
asphalt; 4" thick	89	tns	120.00	10,680	
Granite curbing	4,530	lf	42.00	190,260	
Patching for utility work	40,305	sf	2.50	100,763	



PSR Estimate

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK OPTION B.2							
54	Parking lines	597	spc	85.00	50,745		
55	Other road markings	1	ls	10,000.00	10,000		
56	HC curb cuts - allow	15	loc	850.00	12,750		
57	SUBTOTAL					1,508,598	
58							
59	<u>Intersection Work</u>						
60	Traffic Signal and intersection work	1	ls	1,500,000.00	1,500,000		
61	SUBTOTAL					1,500,000	
62							
63	<u>Farm Street Access</u>						
64	Site construction fence/barricades	4,000	lf	16.00	64,000		
65	Site construction fence gates and construction entrance	1	ea	10,000.00	10,000		
66	Silt fence/erosion control	4,000	lf	12.00	48,000		
67	Clear trees, remove all stumps etc. - allow	2	acre	8,000.00	16,000		
68	Miscellaneous demolition including utilities	1	ls	50,000.00	50,000		
69	<u>Topsoil handling</u>						
70	Strip topsoil and forest organics and remove off-site; allow	4,500	cy	16.00	72,000		
71	<u>Earthwork</u>						
72	To design subgrade of site; includes no credit for selling processed rock	15,700	cy	45.00	706,500		
73	Trench; for utility lines	500	cy	65.00	32,500		
74	Rock excavation/hauling to stockpile location	20,700	cy	7.00	144,900		
75	Process and stockpile for reuse on site x1.65 (2" minus)	14,850	tns	7.00	103,950		
76	Disposal premium; risk of not selling 50% of rock left	3,350	cy	20.00	67,000		
77	<u>Site Earthwork</u>						
78	Fill - reuse processed rock	9,000	cy	12.00	108,000		
79	Fine grading	7,778	sy	2.25	17,501		
80	<u>Access drive to Farm Street</u>	70,000	sf				
81	gravel base; 12" thick	2,593	cy	40.00	103,720		
82	asphalt; 4" thick	1,733	tns	120.00	207,960		
83	Granite curbing	4,530	lf	42.00	190,260		
84	Patching for utility work	7,915	sf	2.50	19,788		
85	8" CLDI- water	3,210	lf	125.00	401,250		
86	Connect to existing - water	1	loc	12,500.00	12,500		
87	6" PVC - sewer	800	lf	80.00	64,000		
88	12" HDPE - drainage	1,730	lf	80.00	138,400		
89	24" HDPE - drainage	965	lf	110.00	106,150		
90	Subsurface infiltration system - drainage	2,100	sf	40.00	84,000		
91	Precast block retaining wall	350	lf	250.00	87,500		
92	Import topsoil; swell 25%	579	cy	60.00	34,740		
93	Lawn - seed	25,000	sf	0.35	8,750		
94	Irrigation allowance for lawn areas	25,000	sf	1.25	31,250		
95	SUBTOTAL					2,930,619	
96							
97	<u>Pedestrian Paving</u>						
98	Concrete paving	4,615	sf				
99	gravel base, 8"	115	cy	40.00	4,600		
100	4" concrete paving (sidewalks)	4,615	sf	12.00	55,380		
101	7' wide ADA ramp	1,285	sf	25.00	32,125		
102	Sloped Walkway	3,490	sf	16.00	55,840		
103	Remove existing ramp and rebuild for ADA requirements	290	sf	50.00	14,500		
104	Stairs	85	lf	225.00	19,125		
105	Stair handrails	40	lf	275.00	11,000		
106	Dumpster/ Equipment pads	1	ls	10,000.00	10,000		
107	SUBTOTAL					202,570	



PSR Estimate

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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SITEWORK OPTION B.2

Site Furnishings

Site furnishings allowance (trash,bench,bike racks etc.)	1	ls	50,000.00	50,000		
Pre-K Playground allowance	1	ls	125,000.00	125,000		
SUBTOTAL						175,000

Stadium: Synthetic

Synthetic turf football field; brockfil w_sp-17	78,000	sf	8.00	624,000		
Sports netting allowance	1	ls	20,000.00	20,000		
Football goal posts	1	sets	29,000.00	29,000		
Bleachers	954	seats	400.00	381,600		
Press box	1	ls	65,000.00	65,000		
Press box lift, ADA ramp access to rear of press box	1	loc	50,000.00	NR		
Running track pavement; reclaim and repave	58,800	sf	4.50	264,600		
Running track surface	6,533	sf	45.00	293,985		
Walking track surrounding running track	13,400	sf	5.00	67,000		
Turf anchor curb; d-area	400	lf	85.00	34,000		
Shot put pad & throwing area	1	ea	30,000.00	30,000		
Triple jump/Long jump event	2	ea	25,000.00	50,000		
Track fence - assume 4'ht CLF	1,500	lf	50.00	75,000		
Fence - assume 4'ht CLF - single gate	3	ea	800.00	2,400		
Fence - assume 4'ht CLF - double gate	3	ea	1,000.00	3,000		
SUBTOTAL						1,939,585

Baseball field; Natural

Natural grass	93,985	sf	2.00	187,970		
Skinned infield	10,890	sf	3.00	32,670		
Foul poles	2	loc	3,600.00	7,200		
Home plates incl. fortification	1	loc	3,500.00	3,500		
Pitchers mound/rubber incl. fortification	1	loc	7,500.00	7,500		
Bases	1	ls	2,000.00	2,000		
Line markings - allowance	1	ls	5,000.00	5,000		
Baseball backstop	1	ea	50,000.00	50,000		
Fence - assume 6'ht CLF	840	lf	65.00	54,600		
Fence - 6'ht CLF - single gate	3	ea	800.00	2,400		
Fence - 6'ht CLF - double gate	1	ea	1,200.00	1,200		
Baseball scoreboard	1	loc	25,000.00	25,000		
Baseball dugouts	2	ea	20,000.00	40,000		
Bullpen allowance	2	ea	10,000.00	20,000		
Irrigation	93,985	sf	1.25	117,481		
SUBTOTAL						556,521

Softball field; Natural

Infield	11,950	sf	3.00	35,850		
Outfield	34,730	sf	2.00	69,460		
Warning track	1	ls	10,000.00	10,000		
Softball backstop	1	loc	35,000.00	35,000		
Softball dugout	2	ea	20,000.00	40,000		
Foul poles for softball	2	ea	3,600.00	7,200		
Fence - assume 4'ht CLF	795	lf	55.00	43,725		
Fence - assume 4'ht CLF - single gate	3	ea	650.00	1,950		
Fence - assume 4'ht CLF - double gate	1	ea	1,000.00	1,000		
Bullpen allowance	2	ea	10,000.00	20,000		
Irrigation	34,730	sf	1.25	43,413		
SUBTOTAL						307,598



PSR Estimate

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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SITEWORK OPTION B.2

Site Walls

Precast block retaining wall	400	lf	250.00	100,000		
SUBTOTAL						100,000

Landscaping

Import topsoil; swell 25%	5,260	cy	60.00	315,600		
Lawn - seed	227,250	sf	0.35	79,538		
Trees	69	ea	1,200.00	82,800		
Planting allowance including planting soils and mulch	1	ls	250,000.00	250,000		
SUBTOTAL						727,938

G30 CIVIL MECHANICAL UTILITIES

Water supply; Pricing includes E&B and bedding

8" CLDI	1,685	lf	125.00	210,625		
Gate valves	4	ea	1,500.00	6,000		
Connect to existing	1	loc	12,500.00	12,500		
FD connection (assume)	1	ea	2,000.00	2,000		
Fire hydrant	3	ea	6,500.00	19,500		
Thrust blocks	10	ea	850.00	8,500		
SUBTOTAL						259,125

Water supply in road; Pricing includes E&B and bedding

16" Water main work	1,985	lf	185.00	367,225		
Gate valves	4	ea	5,000.00	20,000		
Connect to existing	2	loc	20,000.00	40,000		
Fire hydrant	1	ea	6,500.00	6,500		
Thrust blocks	9	ea	1,000.00	9,000		
SUBTOTAL						442,725

Sanitary; Pricing includes E&B and bedding

4" PVC force main	405	lf	80.00	32,400		
6" PVC	680	lf	80.00	54,400		
Manholes	3	ea	4,500.00	13,500		
Grease trap, 10,000 gal.	1	ea	50,000.00	50,000		
Pipe cleaning and relining	3,185	lf	70.00	222,950		
Pump station; allowance	1	loc	100,000.00	100,000		
SUBTOTAL						473,250

Storm water; Pricing includes E&B and bedding (rock excavation not included)

12" HDPE	3,190	lf	80.00	255,200		
24" HDPE	1,180	lf	110.00	129,800		
AD	8	ea	3,500.00	28,000		
CB	16	ea	4,200.00	67,200		
DMH	12	ea	4,500.00	54,000		
WQI	5	ea	14,000.00	70,000		
Subsurface infiltration system	46,550	sf	40.00	1,862,000		
SUBTOTAL						2,466,200

Gas service

E&B trench for new gas pipe (allow)	2,100	lf	35.00	73,500		
SUBTOTAL						73,500

G40 ELECTRICAL UTILITIES

Civil



PSR Estimate

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
	SITEWORK OPTION B.2						
218	Concrete work for duct banks	1,170	lf	35.00	40,950		
219	Transformer pad / generator pad	2	ea	2,500.00	5,000		
220	Excavation & backfill for duct banks and site lighting	1,170	lf	30.00	35,100		
221	Utility co. backcharges, allow					By Owner	
222	<u>Power & Communications</u>						
223	Primary and communications duct bank	1,170	lf	170.00	198,900		
224	Secondary and generator duct bank	100	lf	500.00	50,000		
225	Sewage station including feeder	1	ls	70,000.00	70,000		
226	<u>Site Lighting</u>						
227	Parking/ Roadway area lighting (allow)	257,010	sf	2.50	642,525		
228	Walkway lighting	800	lf	20.00	16,000		
229	<u>Electric Vehicle Charging Station</u>						
230	EVCS provisions only	1	ea	10,000.00	10,000		
231	<u>Site Security</u>						
232	CCTV surveillance at site	1	ls	100,000.00	100,000		
233	<u>Site Demolition</u>						
234	Site demolition and make safe	1	ls	10,000.00	10,000		
235	SUBTOTAL					1,178,475	
236	TOTAL - SITE DEVELOPMENT						\$17,645,291
237							



PSR Estimate

GFA

380,853

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION C1 NEW BUILDING - 1600 STUDENTS

GROSS FLOOR AREA CALCULATION

First Floor	47,883
Second Floor	57,362
Third Floor	135,060
Fourth Floor	92,617
Fifth Floor	47,931

TOTAL GROSS FLOOR AREA (GFA)

380,853 sf

A10 FOUNDATIONS

A1010 STANDARD FOUNDATIONS

033000 CONCRETE

Strip Footings	1,360	CY
Foundation Walls	2,671	CY
Spread Footings	2,685	CY
Piers	158	CY
Total Foundation Concrete	6,874	CY

Strip footings

Formwork	2,872	sf	14.00	40,208
Re-bar	14,360	lbs.	1.40	20,104
Concrete material	168	cy	130.00	21,840
Placing concrete	168	cy	100.00	16,800

Foundation walls

Formwork	11,488	sf	20.00	229,760
Re-bar	22,976	lbs.	1.40	32,166
Concrete material	297	cy	130.00	38,610
Placing concrete	297	cy	140.00	41,580
Form shelf	1,436	lf	10.00	14,360

Retaining wall footing

Formwork	4,380	sf	14.00	61,320
Re-bar	76,650	lbs.	1.40	107,310
Concrete material	1,192	cy	130.00	154,960
Placing concrete	1,192	cy	100.00	119,200

Retaining wall

Formwork	48,840	sf	22.00	1,074,480
Re-bar	244,200	lbs.	1.40	341,880
Concrete material	2,374	cy	130.00	308,620
Placing concrete	2,374	cy	140.00	332,360
Form shelf	1,628	lf	10.00	16,280

Spread Footings: 13' x 13' x 2'

Formwork	6,032	sf	16.00	96,512
Re-bar	121,920	lbs.	1.40	170,688
Concrete material	762	cy	130.00	99,060
Placing concrete	762	cy	160.00	121,920
Set anchor bolts grout plates	58	ea	150.00	8,700

Spread Footings: 12' x 12' x 2'

Formwork	7,296	sf	16.00	116,736
Re-bar	136,160	lbs.	1.40	190,624
Concrete material	851	cy	130.00	110,630
Placing concrete	851	cy	160.00	136,160
Set anchor bolts grout plates	76	ea	150.00	11,400

Spread Footings: 11' x 11' x 2'

Formwork	7,480	sf	16.00	119,680
Re-bar	128,000	lbs.	1.40	179,200
Concrete material	800	cy	130.00	104,000
Placing concrete	800	cy	160.00	128,000
Set anchor bolts grout plates	85	ea	150.00	12,750

Spread Footings: 10' x 10' x 2'



PSR Estimate

GFA 380,853

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION C1 NEW BUILDING - 1600 STUDENTS

63	Formwork	2,800	sf	16.00	44,800		
64	Re-bar	43,520	lbs.	1.40	60,928		
65	Concrete material	272	cy	130.00	35,360		
66	Placing concrete	272	cy	160.00	43,520		
67	Set anchor bolts grout plates	35	ea	150.00	5,250		
68	<u>Piers/Pilasters</u>						
69	Formwork	6,096	sf	22.00	134,112		
70	Re-bar	39,500	lbs	1.40	55,300		
71	Concrete material	158	cy	130.00	20,540		
72	Placing concrete	158	cy	160.00	25,280		
73	Thickened slab at interior load bearing walls	111	cy	350.00	38,850		
74							
75	070001 WATERPROOFING, DAMPPROOFING AND CAULKING						
76	Dampproofing at brick shelf	5,744	sf	3.00	NR		
77	Waterproofing to retaining wall	24,420	sf	8.00	195,360		
78							
79	072100 THERMAL INSULATION						
80	Insulation	30,164	sf	3.00	90,492		
81							
82	312000 EARTHWORK						
83	<u>Strip footings</u>						
84	Excavation					w/ lowest slab	
85	Remove off site					w/ lowest slab	
86	Backfill with selected material					w/ lowest slab	
87	<u>Spread footings</u>						
88	Excavation					w/ lowest slab	
89	Remove off site					w/ lowest slab	
90	Backfill with selected material					w/ lowest slab	
91	<u>Miscellaneous</u>						
92	Gravel fill beneath footings, 12"					w/ lowest slab	
93	Perimeter drain	2,531	lf	22.00	55,682		
94	Underslab drainage and waterproofing system				Not yet determined		
95	Underslab E&B for plumbing	147,335	sf	1.00	147,335		
96	Dewatering for foundation work	1	ls	50,000.00	50,000		
97	SUBTOTAL						5,580,707
98							

A1020 SPECIAL FOUNDATIONS

No work in this section

SUBTOTAL

-

A1030 LOWEST FLOOR CONSTRUCTION

104		<u>Drilling/matting/blastng.</u>					
105		At building footprint; includes no credit for selling processed rock	12,300	cy	45.00	553,500	
106		To design subgrade of site; includes no credit for selling processed rock	57,700	cy	45.00	w/ site	
107		Trench; for utility lines	1,500	cy	65.00	w/ site	
108		Rock excavation/hauling to stockpile location	12,300	cy	7.00	86,100	
109		Process and stockpile for reuse on site x1.65 (2" minus)	9,075	tns	7.00	w/ site	
110		Process and stockpile for reuse to building up levels at building x1.65 (2" minus) - 36,000cy	59,400	tns	7.00	415,800	
111		Process and stockpile for reuse within building footprint incl. 12" of structural below SOG x1.65 (2" minus) - 30,000cy	49,500	tns	7.00	346,500	
112		Pre split face; for exposed rock slopes; allowance	10,000	sf	9.78	w/ site	
113		<u>Building Earthwork</u>					
114		Fill below footprint to make up level- reuse processed rock	36,000	cy	12.00	432,000	
115		Fill below footprint- reuse processed rock	30,000	cy	12.00	360,000	
116		<u>New Slab on grade, 5" thick</u>	147,335	sf			
117		Rigid insulation, underslab	147,335	sf	2.25	331,504	
118		Vapor barrier	147,335	sf	1.00	147,335	



PSR Estimate

GFA

380,853

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION C1 NEW BUILDING - 1600 STUDENTS

119	Compact existing sub-grade	147,335	sf	0.50	73,668		
120	Mesh reinforcing 15% lap	169,435	sf	1.10	186,379		
121	Concrete - 5" thick; 4,000 psi	2,406	cy	135.00	324,810		
122	Placing concrete	2,406	cy	45.00	108,270		
123	Finishing and curing concrete	147,335	sf	2.50	368,338		
124	Control joints - saw cut	147,335	sf	0.10	14,734		
125	<u>Miscellaneous</u>						
126	Elevator pit, 24" mat foundation w/ 12" concrete wall	3	ea	35,000.00	105,000		
127	Loading dock	1	ls	40,000.00	40,000		
128	Equipment pads	1	ls	15,000.00	15,000		
129	SUBTOTAL					3,908,938	

TOTAL - FOUNDATIONS**\$9,489,645****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**

16.66 lbs/sf

B1010 FLOOR CONSTRUCTION

3,173 tns

Floor Structure - Steel:

Steel beams and columns, 15-22#/SF

1,959 tns 3,800.00 7,444,200

Shear studs

46,704 ea 2.50 116,760

Floor Structure

3", 18ga Metal galvanized floor Deck

233,518 sf 4.00 934,072

WWF reinforcement

268,546 sf 1.10 295,401

Concrete fill to metal deck; total depth 5-1/4" light weight

3,973 cy 175.00 695,275

Place and finish concrete

233,518 sf 3.00 700,554

Rebar to decks

70,055 lbs 1.20 84,066

Misc. angles

233,518 sf 0.50 116,759

Mezzanine

1.20

Steel beams and columns, 15#/SF

150 tns 3,800.00 570,000

Shear studs

4,000 ea 2.50 10,000

3", 18ga Metal galvanized floor Deck

20,000 sf 4.00 80,000

WWF reinforcement

23,000 sf 1.10 25,300

Concrete fill to metal deck; total depth 5-1/4" light weight

340 cy 175.00 59,500

Place and finish concrete

20,000 sf 3.00 60,000

Rebar to decks

6,000 lbs 1.20 7,200

Misc. angles

20,000 sf 0.50 10,000

Miscellaneous

Fire proofing to columns and beams

253,518 sf 2.50 633,795

Fire stopping floors

1 ls 10,000.00 10,000

SUBTOTAL

11,852,882

B1020 ROOF CONSTRUCTIONRoof Structure - Steel:



Northeast Metropolitan Regional Vocational High School

PSR Design Options
Wakefield, MA

02-Dec-20

PSR Estimate

GFA

380,853

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION C1 NEW BUILDING - 1600 STUDENTS

176	Steel beams and columns at roof, 13-18#/SF	1,214	tns	3,800.00	4,613,200		
177	<u>Roof Structure</u>						
178	3" 20 Ga. galvanized metal roof deck	162,069	sf	3.50	567,242		
179	Premium for acoustic deck at gym, cafeteria, auditorium	46,700	sf	7.00	326,900		
180	<u>Miscellaneous</u>						
181	Roof screen support	80	tns	5,000.00	400,000		
182	Concrete at mechanical equipment/ vegetated roof	40,000	sf	10.00	400,000		
183	Intumescent paint	1	ls	50,000.00	50,000		
184	Fire proofing to columns, beams and deck	115,369	sf	3.00	346,107		
185	SUBTOTAL					6,703,449	

TOTAL - SUPERSTRUCTURE

\$18,556,331

B20 EXTERIOR CLOSURE

**B2010 EXTERIOR WALLS
Exterior Wall Area**

145,893 sf
96,289 sf

042000 MASONRY

CMU veneer - large format, Arriscraft	14,589	sf	48.00	700,272
CMU back up	14,589	sf	30.00	437,670
Staging/Lifts to exterior wall	96,289	sf	4.00	385,156

055000 MISC. METALS

Sign at main entrance	1	ls	10,000.00	10,000
Misc. metals at masonry	29,178	sf	1.50	43,767

070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Air barrier	96,289	sf	7.50	722,168
Air barrier/flashing at windows	29,179	lf	6.25	182,369
Miscellaneous sealants to closure	96,289	sf	1.00	96,289

072100 THERMAL INSULATION

Insulation	96,289	sf	3.50	337,012
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076400 CLADDING

Metal panel	29,179	sf	75.00	2,188,425
High performance concrete panel	52,521	sf	90.00	4,726,890
Soffit at overhang, including framing	5,500	sf	90.00	495,000
Roof equipment screen - allow	10,000	sf	70.00	700,000

092900 GYPSUM BOARD ASSEMBLIES

6" CFMF backup	29,179	sf	12.00	350,148
Gypsum Sheathing	29,179	sf	2.75	80,242
Drywall lining to interior face of stud backup	29,179	sf	3.50	102,127
Furring to inside face of retaining walls	24,420	sf	7.00	170,940

SUBTOTAL 11,728,475

B2020 WINDOWS

Exterior Glazed Area 49,604 sf

061000 ROUGH CARPENTRY

Wood blocking at openings	29,179	lf	12.00	350,148
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070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Backer rod & double sealant	29,179	lf	9.00	262,611
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PSR Estimate

GFA 380,853

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION C1 NEW BUILDING - 1600 STUDENTS

235	080001	METAL WINDOWS					
236		Curtainwall, double glazed	21,884	sf	120.00	2,626,080	
237		Storefront, double glazed	21,884	sf	95.00	2,078,980	
238		Sunshades; allow	1	ls	200,000.00	200,000	
239							
240	084500	INSULATED TRANSLUCENT PANELS					
241		Translucent wall panels	5,836	sf	90.00	525,240	
242							
243	089000	LOUVERS					
244		Louvers	250	sf	65.00	16,250	
245		SUBTOTAL					6,059,309
246							
247	B2030	EXTERIOR DOORS					
248		Glazed entrance doors including frame and hardware; double door	12	pr	9,000.00	108,000	
249		Glazed entrance doors including frame and hardware; single door	12	ea	4,500.00	54,000	
250		HM doors, frames and hardware- Double	6	ea	2,000.00	12,000	
251		Overhead doors	8	ea	12,000.00	96,000	
252		Backer rod & double sealant	360	lf	9.00	3,240	
253		Wood blocking at openings	360	lf	3.00	1,080	
254		SUBTOTAL					274,320
255							
256		TOTAL - EXTERIOR CLOSURE					\$18,062,104
257							
258							
259	B30	ROOFING					
260							
261	B3010	ROOF COVERINGS					
262		PVC membrane system	162,069	sf	22.00	3,565,518	
263		Roof edge at membrane roofing	3,971	lf	50.00	198,550	
264		Miscellaneous flashings, accessories etc.	162,069	sf	1.00	162,069	
265		Perimeter blocking and sealants	162,069	sf	1.50	243,104	
266		Allowance for soffits/ overhangs	162,069	sf	3.00	486,207	
267		Premium for vegetated roof/patio	30,000	sf	35.00	1,050,000	
268		SUBTOTAL					5,705,448
269							
270	B3020	ROOF OPENINGS					
271		Skylights	6,240	sf	150.00	936,000	
272		Roof hatch	2	loc	2,500.00	5,000	
273		SUBTOTAL					941,000
274							
275		TOTAL - ROOFING					\$6,646,448
276							
277							
278	C10	INTERIOR CONSTRUCTION					
279							
280	C1010	PARTITIONS					
281		Miscellaneous partitions - glazing, CMU, GWB assemblies, etc.	380,853	gsf	32.00	12,187,296	
282		SUBTOTAL					12,187,296
283							
284	C1020	INTERIOR DOORS					
285		Doors; complete	380,853	gsf	6.00	2,285,118	
286		SUBTOTAL					2,285,118
287							
288	C1030	SPECIALTIES / MILLWORK					
289		Specialties	380,853	gsf	7.50	2,856,398	
290		SUBTOTAL					2,856,398
291							
292		TOTAL - INTERIOR CONSTRUCTION					\$17,328,812
293							
294							
295	C20	STAIRCASES					
296							



PSR Estimate

GFA 380,853

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION C1 NEW BUILDING - 1600 STUDENTS

C2010 STAIR CONSTRUCTION

Feature stairs @ Student Commons	2	flt	60,000.00	120,000		
Egress stairs	8	flt	40,000.00	320,000		
SUBTOTAL						440,000

C2020 STAIR FINISHES

High performance coating to stairs including all railings etc.	10	flt	3,000.00	30,000		
Precast terrazzo treads and risers	560	lf	120.00	67,200		
Rubber tile at stairs - landings	1,000	sf	16.00	16,000		
Rubber tile at stairs - treads & risers	1,200	lft	22.00	26,400		
SUBTOTAL						139,600

TOTAL - STAIRCASES

\$579,600

C30 INTERIOR FINISHES

C3010 WALL FINISHES

Wall finishes	380,853	sf	12.00	4,570,236		
SUBTOTAL						4,570,236

C3020 FLOOR FINISHES

Carpet	23,395	sf	5.50	128,673		
Rubber tile	46,100	sf	12.00	553,200		
Linoleum tile	175,263	sf	6.00	1,051,578		
Premium for acoustic cushioning at upper level classrooms	68,450	sf	3.00	205,350		
Sheet vinyl	15,790	sf	7.00	110,530		
Ceramic tile	6,100	sf	24.00	146,400		
Athletic performance wood	12,660	sf	18.00	227,880		
Vented base	450	lf	8.00	3,600		
Wood sprung floor	2,980	sf	22.00	65,560		
Epoxy terrazzo with integral base	24,250	sf	40.00	970,000		
Poured epoxy with integral base	11,650	sf	16.00	186,400		
Epoxy paint	24,580	sf	2.50	61,450		
Resilient base	1	ls	50,000.00	50,000		
Moisture mitigation				NIC		
SUBTOTAL						3,760,621

C3030 CEILING FINISHES

ACT, 2 x 2	46,100	sf	6.00	276,600		
ACT, 2 x 2; High NRC	10,675	sf	7.50	80,063		
ACT, 2 x 4; High NRC	142,658	sf	7.00	998,606		
GWB; MR	14,130	sf	15.00	211,950		
GWB soffits, allow	1	ls	350,000.00	350,000		
Acoustic separation; GWB, resilient hangers, insulation	74,195	sf	22.00	1,632,290		
Painted structure	99,730	sf	2.00	199,460		
Specialty ceiling @ cafeteria	12,700	sf	50.00	635,000		
Vertical blade ceiling w/ ACT grid @ Culinary restaurant	3,000	sf	40.00	120,000		
Specialty metal ceiling w/ ACT grid @ Cosmetology	6,000	sf	40.00	240,000		
Premium ACT/GWB @ Media	7,775	sf	25.00	194,375		
Auditorium clouds	1	ls	150,000.00	150,000		
SUBTOTAL						5,088,344

TOTAL - INTERIOR FINISHES

\$13,419,201

D10 CONVEYING SYSTEMS

D1010 ELEVATOR

Elevator; 5 stop	2	ea	300,000.00	600,000		
Elevator; 3 stop	1	ea	180,000.00	180,000		
SUBTOTAL						780,000

TOTAL - CONVEYING SYSTEMS

\$780,000



PSR Estimate

GFA 380,853

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION C1 NEW BUILDING - 1600 STUDENTS

D20 PLUMBING

D20 PLUMBING, GENERALLY
Plumbing

SUBTOTAL

380,853 sf 19.50 7,426,634
7,426,634

TOTAL - PLUMBING

\$7,426,634

D30 HVAC

D30 HVAC, GENERALLY
HVAC primarily all electric, air source heat pumps, VRF, and
gas fired hot water boiler to pre-heat RTU's
SUBTOTAL

380,853 sf 62.00 23,612,886
23,612,886

TOTAL - HVAC

\$23,612,886

D40 FIRE PROTECTION

D40 FIRE PROTECTION, GENERALLY
Install new service loop, fire pump and branch FP distribution
SUBTOTAL

380,853 sf 6.50 2,475,545
2,475,545

TOTAL - FIRE PROTECTION

\$2,475,545

D50 ELECTRICAL

Normal power service & distribution 5000A

380,853 sf 5.00 1,904,265

Generator gear and distribution 600KW

380,853 sf 3.50 1,332,986

PV rough-in only

Equipment wiring

380,853 sf 3.50 1,332,986

Lighting, controls and circuitry

380,853 sf 10.00 3,808,530

Branch devices and circuitry

380,853 sf 3.50 1,332,986

Fire alarm including BDA

380,853 sf 3.50 1,332,986

Technology system

380,853 sf 2.00 761,706

Theater lighting systems

1 ls 200,000.00 200,000

Security system

380,853 sf 1.00 380,853

Miscellaneous electrical

380,853 sf 4.00 1,523,412

SUBTOTAL

13,910,710

Communications cabling and equipment allowance provided

1 ls 1,739,625.00 1,739,625

A/V cabling allowance provided

1 ls 104,000.00 104,000

IPTV and video on demand allowance provided

1 ls 360,000.00 360,000

Gym A/V allowance provided

1 ls 128,000.00 128,000

Auditorium/stage A/V allowance provided

1 ls 148,000.00 148,000

Cafeteria/Stage A/V allowance provided

1 ls 148,000.00 148,000

Fitness Center A/V allowance provided

1 ls 15,500.00 15,500

Weights A/V allowance provided

1 ls 15,500.00 15,500

Speech Reinforcement allowance provided

1 ls 244,200.00 244,200

Instructional A/V allowance provided

1 ls 650,000.00 650,000

PA System allowance provided

1 ls 218,200.00 218,200

Clock System allowance provided

1 ls 126,300.00 126,300

SUBTOTAL

3,897,325

Security system allowance provided

1 ls 1,297,200.00 1,297,200

SUBTOTAL

1,297,200

TOTAL - ELECTRICAL

\$19,105,235



Northeast Metropolitan Regional Vocational High School

PSR Design Options
Wakefield, MA

02-Dec-20

PSR Estimate

GFA

380,853

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION C1 NEW BUILDING - 1600 STUDENTS

E10 EQUIPMENT

E10 EQUIPMENT, GENERALLY

Tavares Design, 10.30.2020

Food service equipment	1	ls	825,000.00	825,000	
Basketball backstops	1	ls	27,000.00	27,000	
Stage curtains and rigging	1	ls	650,000.00	650,000	
Divider curtains	1	ls	32,000.00	32,000	
Gym wall padding	1	ls	25,000.00	25,000	
Telescoping bleachers	1	ls	215,000.00	215,000	
Automotive refinishing - Booths/Frame Machine	1	ls	325,000.00	325,000	
Automotive Tech - lifts	1	ls	160,000.00	160,000	
HVAC/Plumbing - Boilers/Furnaces/Split systems	1	ls	65,000.00	65,000	
Cosmetology - Wet stations/Manicure/Styling	1	ls	110,000.00	110,000	
SUBTOTAL					2,434,000
Gymnasium dividing net; electrically operated	1	ls	30,000.00	30,000	
Volleyball net and standards	1	ls	5,000.00	5,000	
Wrestling mat lifter	1	ls	12,000.00	12,000	
Scoreboards and shot clock	1	ls	25,000.00	25,000	
Ceiling mounted batting cage	1	ls	2,500.00	2,500	
Culinary equipment - assume part of Food Service above				incl	
Residential appliances	1	ls	50,000.00	50,000	
Electrically operated projection screens				w/ AV	
SUBTOTAL					124,500

TOTAL - EQUIPMENT

\$2,558,500

E20 FURNISHINGS

E2010 FIXED FURNISHINGS

Entry mats & frames - recessed with carpet/rubber strips	1,000	sf	55.00	55,000	
Window treatments including premium for motorized at Cafeteria & Gymnasium	49,604	sf	7.00	347,228	
Fixed casework and Equipment, Tavares Design, 10.30.2020	1	ls	1,225,000.00	1,225,000	
Auditorium seating	750	seats	310.00	232,500	
SUBTOTAL					1,859,728

E2020 MOVABLE FURNISHINGS

All movable furnishings to be provided and installed by owner

SUBTOTAL					NIC
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TOTAL - FURNISHINGS

\$1,859,728

F10 SPECIAL CONSTRUCTION

F10 SPECIAL CONSTRUCTION

No items in this section

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



Northeast Metropolitan Regional Vocational High School
PSR Design Options
Wakefield, MA

02-Dec-20

PSR Estimate

GFA 380,853

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION C1 NEW BUILDING - 1600 STUDENTS

488

489

TOTAL - SELECTIVE BUILDING DEMOLITION
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SUBTOTAL OPTION C1

\$141,900,669



PSR Estimate

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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SITEWORK OPTION C1

G SITEWORK

1,145,000 sf Affected site area

G10 SITE PREPARATION & DEMOLITION

Site construction fence/barricades	4,770	lf	16.00	76,320
Site construction fence gates and construction entrance	2	ea	10,000.00	20,000
Police details/road closures/phasing for utility work	1	ls	125,000.00	125,000
Pavement/curbing removal - breakhart trail	7,355	sf	1.25	9,194
Pavement/curbing removal- site	295,000	sf	1.25	368,750
Pavement/curbing removal- utility work in road	40,300	sf	1.25	50,375
Clear trees, remove all stumps etc. - allow	2	acre	8,000.00	16,000
Construction laydown area	1	ls	10,000.00	10,000
Miscellaneous demolition including utilities	1	ls	200,000.00	200,000
Temporary enabling - parking, electrical	1	ls	150,000.00	150,000
SUBTOTAL				

1,025,639

Earthwork

Pre-blast survey 1 ls 100,000.00 100,000

Topsoil handling

Strip topsoil and forest organics and remove off-site 13,000 cy 16.00 208,000

Drilling/matting/blasting

At building footprint; includes no credit for selling processed rock 12,300 cy 45.00 w/ building

To design subgrade of site; includes no credit for selling processed rock 57,700 cy 45.00 2,596,500

Trench; for utility lines 1,500 cy 65.00 97,500

Rock excavation/hauling to stockpile location 59,200 cy 7.00 414,400

Process and stockpile for reuse on site x1.65 (2" minus) 9,075 tns 7.00 63,525

Process and stockpile for reuse to building up levels at building x1.65 (2" minus) - 36,000cy 59,400 tns 7.00 w/ building

Process and stockpile for reuse within building footprint incl. 12" of structural below SOG x1.65 (2" minus) - 30,000cy 49,500 tns 7.00 w/ building

Pre split face; for exposed rock slopes; allowance 10,000 sf 9.78 97,800

Building Earthwork

Fill below footprint to make up level- reuse processed rock 36,000 cy 12.00 w/ building

Fill below footprint- reuse processed rock 30,000 cy 12.00 w/ building

Site Earthwork

Fill - reuse processed rock 5,500 cy 12.00 66,000

Fill - import common fill; swell 25% 60,625 cy 23.00 1,394,375

Groundwater management/ control measures 5 mths 20,000.00 100,000

Fine grading 71,571 sy 2.25 161,035

Hazardous Waste Remediation

Remove existing underground fuel storage tanks assume not required

Dispose/treat contaminated soils assume not required

Erosion Control

Silt fence/erosion control, wash bays, stock piles 4,770 lf 12.00 57,240

Inlet protection; allow 20 ea 250.00 5,000

Slope protection; allow 1 ls 25,000.00 25,000

Tree protection; allow 500 lf 10.00 5,000

Wheel wash stations 1 ls 15,000.00 15,000

Silt fence maintenance and monitoring 1 ls 30,000.00 30,000

SUBTOTAL

5,436,375

G20 SITE IMPROVEMENTS

Asphalt Paving: parking lot and roadway 253,400 sf

gravel base; 12" thick 9,385 cy 40.00 375,400

asphalt; 4" thick 6,272 tns 120.00 752,640



PSR Estimate

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK OPTION C1							
54	Granite curbing	12,805	lf	42.00	537,810		
55	Parking lines	439	spc	85.00	37,315		
56	<u>Access drive for maintenance of fields</u>	2,595	sf				
57	gravel base; 12" thick	96	cy	40.00	3,840		
58	asphalt; 4" thick	64	tns	120.00	7,680		
59	Patching for utility work	40,305	sf	2.50	100,763		
60	Other road markings	1	ls	10,000.00	10,000		
61	HC curb cuts - allow	15	loc	850.00	12,750		
62	SUBTOTAL					1,838,198	
63							
64	<u>Pedestrian Paving</u>						
65	Concrete walks	3,365	sf				
66	gravel base, 8"	84	cy	40.00	3,360		
67	4" concrete paving (sidewalks)	3,365	sf	12.00	40,380		
68	Dumpster/ Equipment pads	1	ls	10,000.00	10,000		
69	Building access plaza	1	ls	250,000.00	250,000		
70	SUBTOTAL					303,740	
71							
72	<u>Intersection Work</u>						
73	Traffic Signal and intersection work	1	ls	1,500,000.00	1,500,000		
74	SUBTOTAL					1,500,000	
75							
76	<u>Farm Street Access</u>						
77	Site construction fence/barricades	4,000	lf	16.00	64,000		
78	Site construction fence gates and construction entrance	1	ea	10,000.00	10,000		
79	Silt fence/erosion control	4,000	lf	12.00	48,000		
80	Clear trees, remove all stumps etc. - allow	2	acre	8,000.00	16,000		
81	Miscellaneous demolition including utilities	1	ls	50,000.00	50,000		
82	<u>Topsoil handling</u>						
83	Strip topsoil and forest organics and remove off-site; allow	4,500	cy	16.00	72,000		
84	<u>Earthwork</u>						
85	To design subgrade of site; includes no credit for selling processed rock	15,700	cy	45.00	706,500		
86	Trench; for utility lines	500	cy	65.00	32,500		
87	Rock excavation/hauling to stockpile location	20,700	cy	7.00	144,900		
88	Process and stockpile for reuse on site x1.65 (2" minus)	14,850	tns	7.00	103,950		
89	Disposal premium; risk of not selling 50% of rock left	3,350	cy	20.00	67,000		
90	<u>Site Earthwork</u>						
91	Fill - reuse processed rock	9,000	cy	12.00	108,000		
92	Fine grading	7,778	sy	2.25	17,501		
93	<u>Access drive to Farm Street</u>	70,000	sf				
94	gravel base; 12" thick	2,593	cy	40.00	103,720		
95	asphalt; 4" thick	1,733	tns	120.00	207,960		
96	Granite curbing	4,530	lf	42.00	190,260		
97	Patching for utility work	7,915	sf	2.50	19,788		
98	8" CLDI- water	3,210	lf	125.00	401,250		
99	Connect to existing - water	1	loc	12,500.00	12,500		
100	6" PVC - sewer	800	lf	80.00	64,000		
101	12" HDPE - drainage	1,730	lf	80.00	138,400		
102	24" HDPE - drainage	965	lf	110.00	106,150		
103	Subsurface infiltration system - drainage	2,100	sf	40.00	84,000		
104	Precast block retaining wall	350	lf	250.00	87,500		
105	Import topsoil; swell 25%	579	cy	60.00	34,740		
106	Lawn - seed	25,000	sf	0.35	8,750		
107	Irrigation allowance for lawn areas	25,000	sf	1.25	31,250		



PSR Estimate

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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SITEWORK OPTION C1

108	SUBTOTAL					2,930,619	
109							
110	<u>Site Furnishings</u>						
111	Site furnishings allowance (trash,bench,bike racks etc.)	1	ls	50,000.00	50,000		
112	Pre-K Playground allowance	1	ls	125,000.00	125,000		
113	SUBTOTAL					175,000	
114							
115	<u>Stadium: Synthetic</u>						
116	Synthetic turf football field; brockfil w_sp-17	78,000	sf	8.00	624,000		
117	Sports netting allowance	1	ls	20,000.00	20,000		
118	Football goal posts	1	sets	29,000.00	29,000		
119	Bleachers	954	seats	400.00	381,600		
120	Press box	1	ls	65,000.00	65,000		
121	Press box lift	1	loc	50,000.00	50,000		
122	Running track pavement; reclaim and repave	58,800	sf	4.50	264,600		
123	Running track surface	6,533	sf	45.00	293,985		
124	Walking track surrounding running track	13,400	sf	5.00	67,000		
125	Turf anchor curb; d-area	400	lf	85.00	34,000		
126	Shot put pad & throwing area	1	ea	30,000.00	30,000		
127	Triple jump/Long jump event	2	ea	25,000.00	50,000		
128	Track fence - assume 4'ht CLF	1,500	lf	50.00	75,000		
129	Fence - assume 4'ht CLF - single gate	3	ea	800.00	2,400		
130	Fence - assume 4'ht CLF - double gate	3	ea	1,000.00	3,000		
131	SUBTOTAL					1,989,585	
132							
133	<u>Baseball field: Natural Renovation</u>						
134	Amend natural grass; allowance to re-seed/repair	93,985	sf	0.75	70,489		
135	Skinned infield	10,890	sf	3.00	32,670		
136	Foul poles	2	loc	3,600.00	7,200		
137	Home plates incl. fortification	1	loc	3,500.00	3,500		
138	Pitchers mound/rubber incl. fortification	1	loc	7,500.00	7,500		
139	Bases	1	ls	2,000.00	2,000		
140	Line markings - allowance	1	ls	5,000.00	5,000		
141	Baseball backstop -per narrative	1	ea	50,000.00	50,000		
142	Fence - assume 4'ht CLF with safety cap	840	lf	55.00	46,200		
143	Fence - assume 4'ht CLF - single gate	3	ea	650.00	1,950		
144	Fence - assume 4'ht CLF - double gate	1	ea	1,000.00	1,000		
145	Baseball scoreboard	1	loc	25,000.00	25,000		
146	Baseball dugouts	2	ea	20,000.00	40,000		
147	Bullpen allowance	2	ea	10,000.00	20,000		
148	Irrigation	93,985	sf	1.25	117,481		
149	SUBTOTAL					429,990	
150							
151	<u>Softball field: Synthetic</u>						
152	Synthetic turf softball field; brockfil w_sp-17	49,400	sf	8.00	395,200		
153	Turf anchor curb	900	lf	85.00	76,500		
154	Softball backstop	1	ls	35,000.00	35,000		
155	Softball dugout	2	ea	20,000.00	40,000		
156	Foul poles	2	ea	3,600.00	7,200		
157	Fence - assume 4'ht CLF with safety cap	1,090	lf	55.00	59,950		
158	Fence - assume 4'ht CLF - single gate	3	ea	650.00	1,950		
159	Fence - assume 4'ht CLF - double gate	1	ea	1,000.00	1,000		
160	SUBTOTAL					616,800	
161							
162	<u>Soccer field: Synthetic</u>						



PSR Estimate

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
	SITEWORK OPTION C1						
163	Synthetic turf at soccer field	80,300	sf	8.00	642,400		
164	Turf anchor curbing	1,180	lf	85.00	100,300		
165	Soccer goals	2	ea	12,500.00	25,000		
166	Soccer/softball scoreboard	1	loc	25,000.00	25,000		
167	SUBTOTAL					792,700	
168							
169	<u>Site Walls</u>						
170	Precast block retaining wall	765	lf	250.00	191,250		
171	SUBTOTAL					191,250	
172							
173	<u>Landscaping</u>						
174	Import topsoil; swell 25%	6,121	cy	60.00	367,260		
175	Lawn - seed	264,420	sf	0.35	92,547		
176	Trees	119	ea	1,200.00	142,800		
177	Planting allowance including planting soils and mulch	1	ls	250,000.00	250,000		
178	Irrigation	264,420	sf	1.25	330,525		
179	SUBTOTAL					1,183,132	
180							
181	G30 CIVIL MECHANICAL UTILITIES						
182	<u>Water supply; Pricing includes E&B and bedding</u>						
183	8" CLDI	3,325	lf	125.00	415,625		
184	Gate valves; allow	4	ea	1,500.00	6,000		
185	Connect to existing; allow	2	loc	12,500.00	25,000		
186	FD connection (assume)	1	ea	2,000.00	2,000		
187	Fire hydrant	12	ea	6,500.00	78,000		
188	Thrust blocks; allow	5	ea	850.00	4,250		
189	SUBTOTAL					530,875	
190							
191	<u>Water supply in road; Pricing includes E&B and bedding</u>						
192	16" Water main work	1,985	lf	185.00	367,225		
193	Gate valves	4	ea	5,000.00	20,000		
194	Connect to existing	2	loc	20,000.00	40,000		
195	Fire hydrant	1	ea	6,500.00	6,500		
196	Thrust blocks	9	ea	1,000.00	9,000		
197	SUBTOTAL					442,725	
198							
199	<u>Sanitary; Pricing includes E&B and bedding</u>						
200	6" PVC	850	lf	80.00	68,000		
201	Manholes	5	ea	4,500.00	22,500		
202	Grease trap, 10,000 gal.	1	ea	50,000.00	50,000		
203	Pipe cleaning and relining	678	lf	100.00	67,800		
204	SUBTOTAL					208,300	
205							
206	<u>Storm water; Pricing includes E&B and bedding</u>						
207	12" HDPE	3,665	lf	80.00	293,200		
208	24" HDPE	1,320	lf	110.00	145,200		
209	AD	10	ea	3,500.00	35,000		
210	CB	40	ea	4,200.00	168,000		
211	DMH	30	ea	4,500.00	135,000		
212	WQI	6	ea	12,000.00	72,000		
213	Stadium field drainage allowance; includes track drains	1	ls	175,000.00	175,000		
214	Softball field drainage allowance	1	ls	100,000.00	100,000		
215	Soccer field drainage allowance	1	ls	100,000.00	100,000		
216	Subsurface infiltration system	47,700	sf	40.00	1,908,000		
217	SUBTOTAL					3,131,400	



PSR Estimate

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK OPTION C1							
	<u>Gas service</u>						
	E&B trench for new gas pipe	2,100	lf	35.00	73,500		
	SUBTOTAL					73,500	
G40 ELECTRICAL UTILITIES							
	<u>Civil</u>						
	Concrete work for duct banks	1,350	lf	35.00	47,250		
	Transformer pad / generator pad	2	ea	2,500.00	5,000		
	Excavation & backfill for duct banks	1,350	lf	30.00	40,500		
	Utility co. backcharges, allow				By Owner		
	<u>Power & Communications</u>						
	Primary and communications duct bank	1,350	lf	170.00	229,500		
	Secondary and generator duct bank	100	lf	500.00	50,000		
	Electrical to maintenance Building	1	ls	50,000.00	50,000		
	<u>Site Lighting</u>						
	Parking/ Roadway area lighting (allow)	255,995	sf	2.50	639,988		
	Walkway lighting	320	lf	20.00	6,400		
	Athletic field lighting; Soccer field	1	ls	450,000.00	450,000		
	Athletic field lighting; Softball field	1	ls	270,000.00	270,000		
	Score board including feeders	2	ea	100,000.00	200,000		
	<u>Electric Vehicle Charging Station</u>						
	EVCS provisions only	1	ea	10,000.00	10,000		
	<u>Site Security</u>						
	CCTV surveillance at site	1	ls	100,000.00	100,000		
	<u>Site Demolition</u>						
	Site demolition and make safe	1	ls	10,000.00	10,000		
	SUBTOTAL					2,108,638	
TOTAL - SITE DEVELOPMENT							\$24,908,466



PSR Estimate

GFA

380,853

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION C2 NEW BUILDING - 1600 STUDENTS

GROSS FLOOR AREA CALCULATION

First Floor	76,917
Second Floor	96,128
Third Floor	149,406
Fourth Floor	58,402

TOTAL GROSS FLOOR AREA (GFA)

380,853 sf

A10 FOUNDATIONS

A1010 STANDARD FOUNDATIONS

033000 CONCRETE

Strip Footings	1,202	CY
Foundation Walls	1,760	CY
Spread Footings	3,038	CY
Piers	198	CY
Total Foundation Concrete	6,198	CY

Strip footings

Formwork	5,918	sf	14.00	82,852
Re-bar	29,590	lbs.	1.40	41,426
Concrete material	345	cy	130.00	44,850
Placing concrete	345	cy	100.00	34,500

Foundation walls

Formwork	23,672	sf	20.00	473,440
Re-bar	47,344	lbs.	1.40	66,282
Concrete material	612	cy	130.00	79,560
Placing concrete	612	cy	140.00	85,680
Form shelf	2,959	lf	10.00	29,590

Retaining wall footing

Formwork	3,148	sf	14.00	44,072
Re-bar	55,090	lbs.	1.40	77,126
Concrete material	857	cy	130.00	111,410
Placing concrete	857	cy	100.00	85,700

Retaining wall

Formwork	23,610	sf	22.00	519,420
Re-bar	118,050	lbs.	1.40	165,270
Concrete material	1,148	cy	130.00	149,240
Placing concrete	1,148	cy	140.00	160,720
Form shelf	787	lf	10.00	7,870

Spread Footings: 13' x 13' x 2'

Formwork	3,120	sf	16.00	49,920
Re-bar	63,040	lbs.	1.40	88,256
Concrete material	394	cy	130.00	51,220
Placing concrete	394	cy	160.00	63,040
Set anchor bolts grout plates	30	ea	150.00	4,500

Spread Footings: 12' x 12' x 2'

Formwork	9,408	sf	16.00	150,528
Re-bar	175,680	lbs.	1.40	245,952
Concrete material	1,098	cy	130.00	142,740
Placing concrete	1,098	cy	160.00	175,680
Set anchor bolts grout plates	98	ea	150.00	14,700

Spread Footings: 11' x 11' x 2'

Formwork	6,424	sf	16.00	102,784
Re-bar	109,920	lbs.	1.40	153,888
Concrete material	687	cy	130.00	89,310
Placing concrete	687	cy	160.00	109,920
Set anchor bolts grout plates	73	ea	150.00	10,950

Spread Footings: 10' x 10' x 2'

Formwork	6,240	sf	16.00	99,840
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Northeast Metropolitan Regional Vocational High School

PSR Design Options
Wakefield, MA

02-Dec-20

PSR Estimate

GFA

380,853

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION C2 NEW BUILDING - 1600 STUDENTS

63	Re-bar	97,120	lbs.	1.40	135,968		
64	Concrete material	607	cy	130.00	78,910		
65	Placing concrete	607	cy	160.00	97,120		
66	Set anchor bolts grout plates	78	ea	150.00	11,700		
67	<u>Spread Footings: 9' x 9' x 2'</u>						
68	Formwork	2,880	sf	16.00	46,080		
69	Re-bar	40,320	lbs.	1.40	56,448		
70	Concrete material	252	cy	130.00	32,760		
71	Placing concrete	252	cy	160.00	40,320		
72	Set anchor bolts grout plates	40	ea	150.00	6,000		
73	<u>Piers/Pilasters</u>						
74	Formwork	7,656	sf	22.00	168,432		
75	Re-bar	49,500	lbs	1.40	69,300		
76	Concrete material	198	cy	130.00	25,740		
77	Placing concrete	198	cy	160.00	31,680		
78	Thickened slab at interior load bearing walls	111	cy	350.00	38,850		
79							
80	070001 WATERPROOFING, DAMPPROOFING AND CAULKING						
81	Dampproofing at brick shelf	11,836	sf	3.00	NR		
82	Waterproofing to retaining wall	11,805	sf	8.00	94,440		
83							
84	072100 THERMAL INSULATION						
85	Insulation	23,641	sf	3.00	70,923		
86							
87	312000 EARTHWORK						
88	<u>Strip footings</u>						
89	Excavation					w/ lowest slab	
90	Remove off site					w/ lowest slab	
91	Backfill with selected material					w/ lowest slab	
92	<u>Spread footings</u>						
93	Excavation					w/ lowest slab	
94	Remove off site					w/ lowest slab	
95	Backfill with selected material					w/ lowest slab	
96	<u>Miscellaneous</u>						
97	Gravel fill beneath footings, 12"					w/ lowest slab	
98	Perimeter drain	3,746	lf	22.00	82,412		
99	Underslab drainage and waterproofing system				Not yet determined		
100	Underslab E&B for plumbing	183,800	sf	1.00	183,800		
101	Dewatering for foundation work	1	ls	50,000.00	50,000		
102	SUBTOTAL						5,133,119

A1020 SPECIAL FOUNDATIONS

No work in this section

SUBTOTAL

-

A1030 LOWEST FLOOR CONSTRUCTION

109		<u>Drilling/matting/blasting</u>					
110		At building footprint; includes no credit for selling processed rock	39,600	cy	45.00	1,782,000	
111		To design subgrade of site; includes no credit for selling processed rock	42,100	cy	45.00	w/ site	
112		Trench; for utility lines	1,500	cy	65.00	w/ site	
113		Rock excavation/hauling to stockpile location	39,600	cy	7.00	277,200	
114		Process and stockpile for reuse on site x1.65 (2" minus)	70,125	tns	7.00	w/ site	
115		Process and stockpile for reuse within building footprint incl. 12" of structural below SOG x1.65 (2" minus) - 39,200cy	64,680	tns	7.00	452,760	
116		Pre split face; for exposed rock slopes; allowance	10,000	sf	9.78	w/ site	
117		<u>Building Earthwork</u>					
118		Fill below footprint- reuse processed rock	39,200	cy	12.00	470,400	
119		<u>New Slab on grade, 5" thick</u>	183,800	sf			
120		Rigid insulation, underslab	183,800	sf	2.25	413,550	



PSR Estimate

GFA

380,853

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION C2 NEW BUILDING - 1600 STUDENTS							
121	Vapor barrier	183,800	sf	1.00	183,800		
122	Compact existing sub-grade	183,800	sf	0.50	91,900		
123	Mesh reinforcing 15% lap	211,370	sf	1.10	232,507		
124	Concrete - 5" thick; 4,000 psi	3,002	cy	135.00	405,270		
125	Placing concrete	3,002	cy	45.00	135,090		
126	Finishing and curing concrete	183,800	sf	2.50	459,500		
127	Control joints - saw cut	183,800	sf	0.10	18,380		
128	Courtyard Slab on grade, 5" thick	4,400	sf				
129	Rigid insulation, underslab	4,400	sf	2.25	9,900		
130	Vapor barrier	4,400	sf	1.00	4,400		
131	Compact existing sub-grade	4,400	sf	0.50	2,200		
132	Mesh reinforcing 15% lap	5,060	sf	1.10	5,566		
133	Concrete - 5" thick; 4,000 psi	72	cy	135.00	9,720		
134	Placing concrete	72	cy	45.00	3,240		
135	Finishing and curing concrete	4,400	sf	2.50	11,000		
136	Control joints - saw cut	4,400	sf	0.10	440		
137	Miscellaneous						
138	Elevator pit, 24" mat foundation w/ 12" concrete wall	2	ea	35,000.00	70,000		
139	Loading dock	1	ls	40,000.00	40,000		
140	Equipment pads	1	ls	15,000.00	15,000		
141	SUBTOTAL					5,093,823	
142							
143	TOTAL - FOUNDATIONS						\$10,226,942
144							
145	A20 BASEMENT CONSTRUCTION						
146							
147							
148	A2010 BASEMENT EXCAVATION						
149	No Work in this section						
150	SUBTOTAL					-	
151							
152	A2020 BASEMENT WALLS						
153	No Work in this section						
154	SUBTOTAL					-	
155							
156	TOTAL - BASEMENT CONSTRUCTION						
157							
158							
159	B10 SUPERSTRUCTURE						
160		16.47	lbs/sf				
161	B1010 FLOOR CONSTRUCTION	3,137	tns				
162	Floor Structure - Steel:						
163	Steel beams and columns, 15#/SF	1,478	tns	3,800.00	5,616,400		
164	Shear studs	39,411	ea	2.50	98,528		
165	Floor Structure						
166	3", 18ga Metal galvanized floor Deck	197,053	sf	4.00	788,212		
167	WWF reinforcement	226,611	sf	1.10	249,272		
168	Concrete fill to metal deck; total depth 5-1/4" light weight	3,353	cy	175.00	586,775		
169	Place and finish concrete	197,053	sf	3.00	591,159		
170	Rebar to decks	59,116	lbs	1.20	70,939		
171	Misc. angles	197,053	sf	0.50	98,527		
172	Mezzanine			1.20			
173	Steel beams and columns, 15#/SF	150	tns	3,800.00	570,000		
174	Shear studs	4,000	ea	2.50	10,000		
175	3", 18ga Metal galvanized floor Deck	20,000	sf	4.00	80,000		
176	WWF reinforcement	23,000	sf	1.10	25,300		
177	Concrete fill to metal deck; total depth 5-1/4" light weight	340	cy	175.00	59,500		



PSR Estimate

GFA 380,853

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION C2 NEW BUILDING - 1600 STUDENTS

178	Place and finish concrete	20,000	sf	3.00	60,000		
179	Rebar to decks	6,000	lbs	1.20	7,200		
180	Misc. angles	20,000	sf	0.50	10,000		
181	<u>Miscellaneous</u>						
182	Fire proofing to columns and beams	217,053	sf	2.50	542,633		
183	Fire stopping floors	1	ls	10,000.00	10,000		
184	SUBTOTAL					9,474,445	

B1020 ROOF CONSTRUCTION

187	<u>Roof Structure - Steel:</u>						
188	Steel beams and columns at roof, 13-22#/SF	1,659	tns	3,800.00	6,304,200		
189	<u>Roof Structure</u>						
190	3" 20 Ga. galvanized metal roof deck	202,180	sf	3.50	707,630		
191	Premium for acoustic deck at gym, cafeteria, auditorium	28,000	sf	7.00	196,000		
192	<u>Miscellaneous</u>						
193	Roof screen support	80	tns	5,000.00	400,000		
194	Concrete at mechanical equipment/ vegetated roof	16,000	sf	10.00	160,000		
195	Intumescent paint	1	ls	50,000.00	50,000		
196	Fire proofing to columns, beams and deck	174,180	sf	3.00	522,540		
197	SUBTOTAL					8,340,370	

TOTAL - SUPERSTRUCTURE

\$17,814,815

B20 EXTERIOR CLOSURE

B2010 EXTERIOR WALLS
Exterior Wall Area

136,928 sf
90,373 sf

042000 MASONRY

CMU veneer - large format, Arriscraft	13,693	sf	48.00	657,264
CMU back up	13,693	sf	30.00	410,790
Staging/Lifts to exterior wall	90,373	sf	4.00	361,492

055000 MISC. METALS

Sign at main entrance	1	ls	10,000.00	10,000
Misc. metals at masonry	27,386	sf	1.50	41,079

070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Air barrier	90,373	sf	7.50	677,798
Air barrier/flashing at windows	27,385	lf	6.25	171,156
Miscellaneous sealants to closure	90,373	sf	1.00	90,373

072100 THERMAL INSULATION

Insulation	90,373	sf	3.50	316,306
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076400 CLADDING

Metal panel	27,386	sf	75.00	2,053,950
High performance concrete panel	49,294	sf	90.00	4,436,460
Soffit at overhang, including framing				NIC
Roof equipment screen - allow	10,000	sf	70.00	700,000

092900 GYPSUM BOARD ASSEMBLIES

6" CFMF backup	27,386	sf	12.00	328,632
Gypsum Sheathing	27,386	sf	2.75	75,312
Drywall lining to interior face of stud backup	27,386	sf	3.50	95,851
Furring to inside face of retaining walls	11,805	sf	7.00	82,635



PSR Estimate

GFA 380,853

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION C2 NEW BUILDING - 1600 STUDENTS

236 SUBTOTAL 10,509,098

B2020 WINDOWS

Exterior Glazed Area

46,555 sf

061000 ROUGH CARPENTRY

Wood blocking at openings

27,385 lf 12.00 328,620

070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Backer rod & double sealant

27,385 lf 9.00 246,465

080001 METAL WINDOWS

Curtainwall, double glazed

20,539 sf 120.00 2,464,680

Storefront, double glazed

20,539 sf 95.00 1,951,205

Sunshades; allow

1 ls 200,000.00 200,000

084500 INSULATED TRANSLUCENT PANELS

Translucent wall panels

5,477 sf 90.00 492,930

089000 LOUVERS

Louvers

250 sf 65.00 16,250

SUBTOTAL

5,700,150

B2030 EXTERIOR DOORS

Glazed entrance doors including frame and hardware; double door

12 pr 9,000.00 108,000

Glazed entrance doors including frame and hardware; single door

12 ea 4,500.00 54,000

HM doors, frames and hardware- Double

6 ea 2,000.00 12,000

Overhead doors

8 ea 12,000.00 96,000

Backer rod & double sealant

360 lf 9.00 3,240

Wood blocking at openings

360 lf 3.00 1,080

SUBTOTAL

274,320

TOTAL - EXTERIOR CLOSURE

\$16,483,568

B30 ROOFING

B3010 ROOF COVERINGS

PVC membrane system

202,180 sf 22.00 4,447,960

Roof edge at membrane roofing

3,845 lf 50.00 192,250

Miscellaneous flashings, accessories etc.

202,180 sf 1.00 202,180

Perimeter blocking and sealants

202,180 sf 1.50 303,270

Allowance for soffits/ overhangs

202,180 sf 3.00 606,540

Premium for vegetated roof/patio

6,000 sf 35.00 210,000

SUBTOTAL

5,962,200

B3020 ROOF OPENINGS

Skylights

6,240 sf 150.00 936,000

Roof hatch

2 loc 2,500.00 5,000

SUBTOTAL

941,000

TOTAL - ROOFING

\$6,903,200

C10 INTERIOR CONSTRUCTION

C1010 PARTITIONS

Miscellaneous partitions - glazing, CMU, GWB assemblies, etc.

380,853 gsf 32.00 12,187,296

SUBTOTAL

12,187,296

C1020 INTERIOR DOORS



PSR Estimate

GFA 380,853

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION C2 NEW BUILDING - 1600 STUDENTS							
297	Doors; complete	380,853	gsf	6.00	2,285,118		
298	SUBTOTAL					2,285,118	
299							
300	C1030 SPECIALTIES / MILLWORK						
301	Specialties	380,853	gsf	7.50	2,856,398		
302	SUBTOTAL					2,856,398	
303							
304	TOTAL - INTERIOR CONSTRUCTION						\$17,328,812
305							
306							
307	C20 STAIRCASES						
308							
309	C2010 STAIR CONSTRUCTION						
310	Feature stairs, 1-3	2	flt	75,000.00	150,000		
311	Feature stairs, 1-2	1	flt	60,000.00	60,000		
312	Egress stairs	8	flt	40,000.00	320,000		
313	SUBTOTAL					530,000	
314							
315	C2020 STAIR FINISHES						
316	High performance coating to stairs including all railings etc.	11	flt	3,000.00	33,000		
317	Precast terrazzo treads and risers	840	lf	120.00	100,800		
318	Rubber tile at stairs - landings	1,100	sf	16.00	17,600		
319	Rubber tile at stairs - treads & risers	1,650	lft	22.00	36,300		
320	SUBTOTAL					187,700	
321							
322	TOTAL - STAIRCASES						\$717,700
323							
324							
325	C30 INTERIOR FINISHES						
326							
327	C3010 WALL FINISHES						
328	Wall finishes	380,853	sf	12.00	4,570,236		
329	SUBTOTAL					4,570,236	
330							
331	C3020 FLOOR FINISHES						
332	Carpet	19,295	sf	5.50	106,123		
333	Rubber tile	62,150	sf	12.00	745,800		
334	Linoleum tile	102,383	sf	6.00	614,298		
335	Premium for acoustic cushioning at upper level classrooms	73,485	sf	3.00	220,455		
336	Sheet vinyl	24,010	sf	7.00	168,070		
337	Ceramic tile	4,400	sf	24.00	105,600		
338	Athletic performance wood	12,660	sf	18.00	227,880		
339	Vented base	450	lf	8.00	3,600		
340	Wood sprung floor	2,980	sf	22.00	65,560		
341	Epoxy terrazzo with integral base	15,435	sf	40.00	617,400		
342	Poured epoxy	11,320	sf	16.00	181,120		
343	Epoxy paint	88,135	sf	2.50	220,338		
344	Resilient base	1	ls	50,000.00	50,000		
345	Moisture mitigation					NIC	
346	SUBTOTAL					3,326,244	
347							
348	C3030 CEILING FINISHES						
349	ACT, 2 x 2	62,150	sf	6.00	372,900		
350	ACT, 2 x 2; High NRC	10,500	sf	7.50	78,750		
351	ACT, 2 x 4; High NRC	137,130	sf	7.00	959,910		
352	GWB; MR	12,100	sf	15.00	181,500		
353	GWB soffits, allow	1	ls	350,000.00	350,000		
354	Acoustic separation; GWB, resilient hangers, insulation					NR	
355	Painted structure	100,518	sf	2.00	201,036		
356	Specialty ceiling @ cafeteria	7,500	sf	50.00	375,000		
357	Vertical blade ceiling w/ ACT grid @ Culinary restaurant	3,000	sf	40.00	120,000		
358	Specialty metal ceiling w/ ACT grid @ Cosmetology	4,820	sf	40.00	192,800		
359	Premium ACT/GWB @ Media	5,050	sf	25.00	126,250		



PSR Estimate

GFA 380,853

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION C2 NEW BUILDING - 1600 STUDENTS

Auditorium clouds	1	ls	150,000.00	150,000		
SUBTOTAL						3,108,146

TOTAL - INTERIOR FINISHES						\$11,004,626
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D10 CONVEYING SYSTEMS

D1010 ELEVATOR						
Elevator; 4 stop	2	ea	240,000.00	480,000		
SUBTOTAL						480,000

TOTAL - CONVEYING SYSTEMS						\$480,000
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D20 PLUMBING

D20 PLUMBING, GENERALLY						
Service entrance, equipment, fixtures and piping.	380,853	sf	19.50	7,426,634		
SUBTOTAL						7,426,634

TOTAL - PLUMBING						\$7,426,634
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D30 HVAC

D30 HVAC, GENERALLY						
HVAC primarily all electric, air source heat pumps, VRF, and gas fired hot water boiler to pre-heat RTU's	380,853	sf	62.00	23,612,886		
SUBTOTAL						23,612,886

TOTAL - HVAC						\$23,612,886
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D40 FIRE PROTECTION

D40 FIRE PROTECTION, GENERALLY						
Install new service loop, fire pump and branch FP distribution	380,853	sf	6.50	2,475,545		
SUBTOTAL						2,475,545

TOTAL - FIRE PROTECTION						\$2,475,545
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D50 ELECTRICAL

Normal power service & distribution 5000A	380,853	sf	5.00	1,904,265		
Generator gear and distribution 600KW	380,853	sf	3.50	1,332,986		
PV rough-in only						
Equipment wiring	380,853	sf	3.50	1,332,986		
Lighting, controls and circuitry	380,853	sf	10.00	3,808,530		
Branch devices and circuitry	380,853	sf	3.50	1,332,986		
Fire alarm including BDA	380,853	sf	3.50	1,332,986		
Technology system	380,853	sf	2.00	761,706		
Theater lighting systems	1	ls	200,000.00	200,000		
Security system	380,853	sf	1.00	380,853		
Miscellaneous electrical	380,853	sf	4.00	1,523,412		
SUBTOTAL						13,910,710

Communications cabling and equipment allowance provided	1	ls	1,739,625.00	1,739,625		
A/V cabling allowance provided	1	ls	104,000.00	104,000		
IPTV and video pn demand allowance provided	1	ls	360,000.00	360,000		
Gym A/V allowance provided	1	ls	128,000.00	128,000		
Auditorium/stage A/V allowance provided	1	ls	148,000.00	148,000		
Cafeteria/Stage A/V allowance provided	1	ls	148,000.00	148,000		
Fitness Center A/V allowance provided	1	ls	15,500.00	15,500		
Weights A/V allowance provided	1	ls	15,500.00	15,500		



PSR Estimate

GFA

380,853

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION C2 NEW BUILDING - 1600 STUDENTS

425	Speech Reinforcement allowance provided	1	ls	244,200.00	244,200		
426	Instructional A/V allowance provided	1	ls	650,000.00	650,000		
427	PA System allowance provided	1	ls	218,200.00	218,200		
428	Clock System allowance provided	1	ls	126,300.00	126,300		
429	SUBTOTAL					3,897,325	
430							
431	Security system allowance provided	1	ls	1,297,200.00	1,297,200		
432	SUBTOTAL					1,297,200	
433							
434	TOTAL - ELECTRICAL						\$19,105,235

E10 EQUIPMENT

E10 EQUIPMENT, GENERALLY

Tavares Design, 10.30.2020

441	Food service equipment	1	ls	825,000.00	825,000		
442	Basketball backstops	1	ls	27,000.00	27,000		
443	Stage curtains and rigging	1	ls	650,000.00	650,000		
444	Divider curtains	1	ls	32,000.00	32,000		
445	Gym wall padding	1	ls	25,000.00	25,000		
446	Telescoping bleachers	1	ls	215,000.00	215,000		
447	Automotive refinishing - Booths/Frame Machine	1	ls	325,000.00	325,000		
448	Automotive Tech - lifts	1	ls	160,000.00	160,000		
449	HVAC/Plumbing - Boilers/Furnaces/Split systems	1	ls	65,000.00	65,000		
450	Cosmetology - Wet stations/Manicure/Styling	1	ls	110,000.00	110,000		
451	SUBTOTAL					2,434,000	
452							
453	Gymnasium dividing net; electrically operated	1	ls	30,000.00	30,000		
454	Volleyball net and standards	1	ls	5,000.00	5,000		
455	Wrestling mat lifter	1	ls	12,000.00	12,000		
456	Scoreboards and shot clock	1	ls	25,000.00	25,000		
457	Ceiling mounted batting cage	1	ls	2,500.00	2,500		
458	Culinary equipment - assume part of Food Service above					incl	
459	Residential appliances	1	ls	50,000.00	50,000		
460	Electrically operated projection screens					w/ AV	
461	SUBTOTAL					124,500	
462							
463	TOTAL - EQUIPMENT						\$2,558,500

E20 FURNISHINGS

E2010 FIXED FURNISHINGS

469	Entry mats & frames - recessed with carpet/rubber strips	1,000	sf	55.00	55,000		
470	Window treatments including premium for motorized at Cafeteria & Gymnasium	46,555	sf	7.00	325,885		
471	Fixed casework and Equipment, Tavares Design, 10.30.2020	1	ls	1,225,000.00	1,225,000		
472	Auditorium seating	750	seats	310.00	232,500		
473	SUBTOTAL					1,838,385	

E2020 MOVABLE FURNISHINGS

All movable furnishings to be provided and installed by owner

477	SUBTOTAL					NIC	
478							
479	TOTAL - FURNISHINGS						\$1,838,385

F10 SPECIAL CONSTRUCTION

F10 SPECIAL CONSTRUCTION

No items in this section



PSR Estimate

GFA 380,853

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION C2 NEW BUILDING - 1600 STUDENTS

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 OPTION C2

\$137,976,848



PSR Estimate

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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SITework OPTION C2

G	SITework	1,000,000	sf	Affected site area			
G10	SITE PREPARATION & DEMOLITION						
	Site construction fence/barricades	3,990	lf	16.00	63,840		
	Site construction fence gates and construction entrance	2	ea	10,000.00	20,000		
	Police details/road closures/phasing for utility work	1	ls	125,000.00	125,000		
	Pavement/curbing removal	276,600	sf	1.25	345,750		
	Pavement/curbing removal- utility work in road	40,300	sf	1.25	50,375		
	Clear trees, remove all stumps etc. - allow	3	acre	8,000.00	24,000		
	Construction laydown area	1	ls	10,000.00	10,000		
	Miscellaneous demolition including utilities	1	ls	200,000.00	200,000		
	SUBTOTAL					838,965	

	<u>Earthwork</u>						
	Pre-blast survey	1	ls	100,000.00	100,000		
	<u>Topsoil handling</u>						
	Strip topsoil and forest organics and remove off-site	10,000	cy	16.00	160,000		
	<u>Drilling/matting/blasting</u>						
	At building footprint; includes no credit for selling processed rock	39,600	cy	45.00	w/ building		
	To design subgrade of site; includes no credit for selling processed rock	42,100	cy	45.00	1,894,500		
	Trench; for utility lines	1,500	cy	65.00	97,500		
	Rock excavation/hauling to stockpile location	43,600	cy	7.00	305,200		
	Process and stockpile for reuse on site x1.65 (2" minus)	70,125	tns	7.00	490,875		
	Process and stockpile for reuse within building footprint incl. 12" of structural below SOG x1.65 (2" minus) - 39,200cy	64,680	tns	7.00	w/ building		
	Pre split face; for exposed rock slopes; allowance	10,000	sf	9.78	97,800		
	<u>Building Earthwork</u>						
	Fill below footprint- reuse processed rock	39,200	cy	12.00	w/ building		
	<u>Site Earthwork</u>						
	Fill - reuse processed rock	34,375	cy	12.00	412,500		
	Fill - import common fill; swell 25%	40,625	cy	23.00	934,375		
	Groundwater management/ control measures	5	mths	20,000.00	100,000		
	Fine grading	57,819	sy	2.25	130,093		

Hazardous Waste Remediation

Remove existing underground fuel storage tanks assume not required
Dispose/treat contaminated soils assume not required

Erosion Control

	Silt fence/erosion control, wash bays, stock piles	3,990	lf	12.00	47,880		
	Inlet protection; allow	20	ea	250.00	5,000		
	Slope protection; allow	1	ls	25,000.00	25,000		
	Tree protection; allow	500	lf	10.00	5,000		
	Wheel wash stations	1	ls	15,000.00	15,000		
	Silt fence maintenance and monitoring	1	ls	30,000.00	30,000		

	SUBTOTAL					4,850,723	
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G20 SITE IMPROVEMENTS

	<u>Asphalt Paving; parking lot and roadway</u>	210,605	sf				
	gravel base; 12" thick	7,800	cy	40.00	312,000		
	asphalt; 4" thick	5,212	tns	120.00	625,440		
	Granite curbing	6,940	lf	42.00	291,480		
	Parking lines	363	spc	85.00	30,855		
	<u>Access drive for maintenance of fields</u>	3,800	sf				
	gravel base; 12" thick	141	cy	40.00	5,640		



PSR Estimate

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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SITework OPTION C2

54	asphalt; 4" thick	94	tns	120.00	11,280		
55	Patching for utility work	40,305	sf	2.50	100,763		
56	Other road markings	1	ls	10,000.00	10,000		
57	HC curb cuts - allow	15	loc	850.00	12,750		
58	SUBTOTAL					1,400,208	

60	<u>Pedestrian Paving</u>						
61	Concrete walks	17,610	sf				
62	gravel base, 8"	437	cy	40.00	17,480		
63	4" concrete paving (sidewalks)	17,610	sf	12.00	211,320		
64	Dumpster/ Equipment pads	1	ls	10,000.00	10,000		
65	Building access plaza	1	ls	250,000.00	250,000		
66	SUBTOTAL					488,800	

68	<u>Intersection Work</u>						
69	Traffic Signal and intersection work	1	ls	#####	1,500,000		
70	SUBTOTAL					1,500,000	

72	<u>Farm Street Access</u>						
73	Site construction fence/barricades	4,000	lf	16.00	64,000		
74	Site construction fence gates and construction entrance	1	ea	10,000.00	10,000		
75	Silt fence/erosion control	4,000	lf	12.00	48,000		
76	Clear trees, remove all stumps etc. - allow	2	acre	8,000.00	16,000		
77	Miscellaneous demolition including utilities	1	ls	50,000.00	50,000		

78	<u>Topsoil handling</u>						
79	Strip topsoil and forest organics and remove off-site; allow	4,500	cy	16.00	72,000		
80	<u>Earthwork</u>						
81	To design subgrade of site; includes no credit for selling processed rock	15,700	cy	45.00	706,500		
82	Trench; for utility lines	500	cy	65.00	32,500		
83	Rock excavation/hauling to stockpile location	20,700	cy	7.00	144,900		
84	Process and stockpile for reuse on site x1.65 (2" minus)	14,850	tns	7.00	103,950		
85	Disposal premium; risk of not selling 50% of rock left	3,350	cy	20.00	67,000		
86	<u>Site Earthwork</u>						
87	Fill - reuse processed rock	9,000	cy	12.00	108,000		
88	Fine grading	7,778	sy	2.25	17,501		

89	<u>Access drive to Farm Street</u>	70,000	sf				
90	gravel base; 12" thick	2,593	cy	40.00	103,720		
91	asphalt; 4" thick	1,733	tns	120.00	207,960		
92	Granite curbing	4,530	lf	42.00	190,260		
93	Patching for utility work	7,915	sf	2.50	19,788		
94	8" CLDI- water	3,210	lf	125.00	401,250		
95	Connect to existing - water	1	loc	12,500.00	12,500		
96	6" PVC - sewer	800	lf	80.00	64,000		
97	12" HDPE - drainage	1,730	lf	80.00	138,400		
98	24" HDPE - drainage	965	lf	110.00	106,150		
99	Subsurface infiltration system - drainage	2,100	sf	40.00	84,000		
100	Precast block retaining wall	350	lf	250.00	87,500		
101	Import topsoil; swell 25%	579	cy	60.00	34,740		
102	Lawn - seed	25,000	sf	0.35	8,750		
103	Irrigation allowance for lawn areas	25,000	sf	1.25	31,250		
104	SUBTOTAL					2,930,619	

106	<u>Site Furnishings</u>						
107	Site furnishings allowance (trash,bench,bike racks etc.)	1	ls	50,000.00	50,000		



PSR Estimate

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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SITework OPTION C2

108	Pre-K Playground allowance	1	ls	125,000.00	125,000		
109	SUBTOTAL					175,000	
110							
111	<u>Stadium; Synthetic</u>						
112	Synthetic turf football field; brockfil w_sp-17	78,000	sf	8.00	624,000		
113	Sports netting allowance	1	ls	20,000.00	20,000		
114	Football goal posts	1	sets	29,000.00	29,000		
115	Bleachers	954	seats	400.00	381,600		
116	Press box	1	ls	65,000.00	65,000		
117	Press box lift	1	loc	50,000.00	50,000		
118	Running track pavement; reclaim and repave	58,800	sf	4.50	264,600		
119	Running track surface	6,533	sf	45.00	293,985		
120	Walking track surrounding running track	13,400	sf	5.00	67,000		
121	Turf anchor curb; d-area	400	lf	85.00	34,000		
122	Shot put pad & throwing area	1	ea	30,000.00	30,000		
123	Triple jump/Long jump event	2	ea	25,000.00	50,000		
124	Track fence - assume 4'ht CLF	1,500	lf	50.00	75,000		
125	Fence - assume 4'ht CLF - single gate	3	ea	800.00	2,400		
126	Fence - assume 4'ht CLF - double gate	3	ea	1,000.00	3,000		
127	SUBTOTAL					1,989,585	
128							
129	<u>Baseball field; Natural</u>						
130	Natural grass	93,985	sf	2.00	187,970		
131	Skinned infield	10,890	sf	3.00	32,670		
132	Warning track	1	ls	15,000.00	15,000		
133	Foul poles	2	loc	3,600.00	7,200		
134	Home plates incl. fortification	1	loc	3,500.00	3,500		
135	Pitchers mound/rubber incl. fortification	1	loc	7,500.00	7,500		
136	Bases	1	ls	2,000.00	2,000		
137	Line markings - allowance	1	ls	5,000.00	5,000		
138	Baseball backstop	1	ea	50,000.00	50,000		
139	Fence - assume 4'ht CLF with safety cap	1,070	lf	55.00	58,850		
140	Fence - assume 4'ht CLF - single gate	3	ea	650.00	1,950		
141	Fence - assume 4'ht CLF - double gate	1	ea	1,000.00	1,000		
142	Baseball scoreboard	1	loc	25,000.00	25,000		
143	Baseball dugouts	2	ea	20,000.00	40,000		
144	Bullpen allowance	2	ea	10,000.00	20,000		
145	Irrigation	93,985	sf	1.25	117,481		
146	SUBTOTAL					575,121	
147							
148	<u>Softball field; Natural Renovation</u>						
149	Infield	11,950	sf	3.00	35,850		
150	Outfield	34,730	sf	2.00	69,460		
151	Warning track	1	ls	10,000.00	10,000		
152	Renovate softball backstop	1	loc	20,000.00	20,000		
153	Softball dugout	2	ea	20,000.00	40,000		
154	Foul poles for softball	2	ea	3,600.00	7,200		
155	Fence - assume 4'ht CLF	795	lf	55.00	43,725		
156	Fence - assume 4'ht CLF - single gate	3	ea	650.00	1,950		
157	Fence - assume 4'ht CLF - double gate	1	ea	1,000.00	1,000		
158	Bullpen allowance	2	ea	10,000.00	20,000		
159	Irrigation	34,730	sf	1.25	43,413		
160	SUBTOTAL					292,598	
161							
162	<u>Site Walls</u>						



Northeast Metropolitan Regional Vocational High School
PSR Design Options
Wakefield, MA

02-Dec-20

PSR Estimate

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
	SITEWORK OPTION C2						
163	Precast block retaining wall	700	lf	250.00	175,000		
164	SUBTOTAL					175,000	
165							
166	<u>Landscaping</u>						
167	Import topsoil; swell 25%	4,462	cy	60.00	267,720		
168	Lawn - seed	192,770	sf	0.35	67,470		
169	Renovate lower practice field; narrative	1	ls	50,000.00	50,000		
170	Trees	112	ea	1,200.00	134,400		
171	Planting allowance including planting soils and mulch	1	ls	250,000.00	250,000		
172	Irrigation	192,770	sf	1.25	240,963		
173	SUBTOTAL					1,010,553	
174							
175	G30 CIVIL MECHANICAL UTILITIES						
176	<u>Water supply; Pricing includes E&B and bedding</u>						
177	8" CLDI	3,615	lf	125.00	451,875		
178	Gate valves; allow	4	ea	1,500.00	6,000		
179	Connect to existing; allow	2	loc	12,500.00	25,000		
180	FD connection (assume)	1	ea	2,000.00	2,000		
181	Fire hydrant	8	ea	6,500.00	52,000		
182	Thrust blocks; allow	5	ea	850.00	4,250		
183	SUBTOTAL					541,125	
184							
185	<u>Water supply in road; Pricing includes E&B and bedding</u>						
186	16" Water main work	1,985	lf	185.00	367,225		
187	Gate valves	4	ea	5,000.00	20,000		
188	Connect to existing	2	loc	20,000.00	40,000		
189	Fire hydrant	1	ea	6,500.00	6,500		
190	Thrust blocks	9	ea	1,000.00	9,000		
191	SUBTOTAL					442,725	
192							
193	<u>Sanitary; Pricing includes E&B and bedding</u>						
194	4" PVC force main	550	lf	80.00	44,000		
195	6" PVC	1,285	lf	80.00	102,800		
196	Manholes	10	ea	4,500.00	45,000		
197	Grease trap, 10,000 gal.	1	ea	50,000.00	50,000		
198	Pipe cleaning and relining	1,161	lf	70.00	81,270		
199	Pump station; allowance	1	loc	100,000.00	100,000		
200	SUBTOTAL					423,070	
201							
202	<u>Storm water; Pricing includes E&B and bedding</u>						
203	12" HDPE	3,315	lf	80.00	265,200		
204	24" HDPE	1,785	lf	110.00	196,350		
205	AD	15	ea	3,500.00	52,500		
206	CB	30	ea	4,200.00	126,000		
207	DMH	30	ea	4,500.00	135,000		
208	WQI	5	ea	12,000.00	60,000		
209	Stadium field drainage allowance; includes track drains	1	ls	175,000.00	175,000		
210	Baseball field drainage allowance	1	ls	100,000.00	100,000		
211	Subsurface infiltration system	46,815	sf	40.00	1,872,600		
212	SUBTOTAL					2,982,650	
213							
214	<u>Gas service</u>						
215	E&B trench for new gas pipe	2,100	lf	35.00	73,500		
216	SUBTOTAL					73,500	
217							



PSR Estimate

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITework OPTION C2							
218	G40 ELECTRICAL UTILITIES						
219	<u>Civil</u>						
220	Concrete work for duct banks	600	lf	35.00	21,000		
221	Transformer pad / generator pad	2	ea	2,500.00	5,000		
222	Excavation & backfill for duct banks and site lighting	600	lf	30.00	18,000		
223	Utility co. backcharges, allow				By Owner		
224	<u>Power & Communications</u>						
225	Primary and communications duct bank	600	lf	170.00	102,000		
226	Secondary and generator duct bank	100	lf	500.00	50,000		
227	Press box including feeder	1	ls	50,000.00	50,000		
228	Sewage station including feeder	1	ls	70,000.00	70,000		
229	<u>Site Lighting</u>						
230	Parking/ Roadway area lighting (allow)	214,405	sf	2.50	536,013		
231	Athletic field lighting; Stadium field	1	ls	540,000.00	540,000		
232	Score board including feeders	2	ea	100,000.00	200,000		
233	<u>Electric Vehicle Charging Station</u>						
234	EVCS provisions only	1	ea	10,000.00	10,000		
235	<u>Site Security</u>						
236	CCTV surveillance at site	1	ls	100,000.00	100,000		
237	<u>Site Demolition</u>						
238	Site demolition and make safe	1	ls	10,000.00	10,000		
239	SUBTOTAL					1,712,013	
240	TOTAL - SITE DEVELOPMENT						\$22,402,255
241							



PSR Estimate

GFA 373,653

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION C3 NEW BUILDING - 1600 STUDENTS

GROSS FLOOR AREA CALCULATION

Basement	21,313
First Floor	154,606
Second Floor	110,376
Third Floor	87,358

TOTAL GROSS FLOOR AREA (GFA)

373,653 sf

A10 FOUNDATIONS

A1010 STANDARD FOUNDATIONS

033000 CONCRETE

Strip Footings	845	CY
Foundation Walls	839	CY
Spread Footings	1,834	CY
Piers	151	CY
Total Foundation Concrete	3,669	CY

Strip footings

Formwork	4,004	sf	14.00	56,056
Re-bar	20,020	lbs.	1.40	28,028
Concrete material	234	cy	130.00	30,420
Placing concrete	234	cy	100.00	23,400

Foundation walls

Formwork	16,016	sf	20.00	320,320
Re-bar	32,032	lbs.	1.40	44,845
Concrete material	414	cy	130.00	53,820
Placing concrete	414	cy	140.00	57,960
Form shelf	2,002	lf	10.00	20,020

Retaining wall footing

Formwork	2,244	sf	14.00	31,416
Re-bar	39,270	lbs.	1.40	54,978
Concrete material	611	cy	130.00	79,430
Placing concrete	611	cy	100.00	61,100

Retaining wall

Formwork	16,830	sf	22.00	370,260
Re-bar	84,150	lbs.	1.40	117,810
Concrete material	425	cy	130.00	55,250
Placing concrete	425	cy	140.00	59,500
Form shelf	561	lf	10.00	5,610

Spread Footings: 12' x 12' x 2'

Formwork	1,848	sf	16.00	29,568
Re-bar	31,680	lbs.	1.40	44,352
Concrete material	198	cy	130.00	25,740
Placing concrete	198	cy	160.00	31,680
Set anchor bolts grout plates	21	ea	150.00	3,150

Spread Footings: 11' x 11' x 2'

Formwork	10,800	sf	16.00	172,800
Re-bar	168,000	lbs.	1.40	235,200
Concrete material	1,050	cy	130.00	136,500
Placing concrete	1,050	cy	160.00	168,000
Set anchor bolts grout plates	135	ea	150.00	20,250

Spread Footings: 10' x 10' x 2'

Formwork	4,000	sf	16.00	64,000
Re-bar	62,240	lbs.	1.40	87,136
Concrete material	389	cy	130.00	50,570
Placing concrete	389	cy	160.00	62,240
Set anchor bolts grout plates	50	ea	150.00	7,500

Spread Footings: 9' x 9' x 2'

Formwork	720	sf	16.00	11,520
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Northeast Metropolitan Regional Vocational High School

PSR Design Options
Wakefield, MA

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PSR Estimate

GFA

373,653

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION C3 NEW BUILDING - 1600 STUDENTS

63	Re-bar	10,080	lbs.	1.40	14,112		
64	Concrete material	63	cy	130.00	8,190		
65	Placing concrete	63	cy	160.00	10,080		
66	Set anchor bolts grout plates	10	ea	150.00	1,500		
67	<u>Spread Footings: 8' x 8' x 2'</u>						
68	Formwork	1,728	sf	16.00	27,648		
69	Re-bar	21,440	lbs.	1.40	30,016		
70	Concrete material	134	cy	130.00	17,420		
71	Placing concrete	134	cy	160.00	21,440		
72	Set anchor bolts grout plates	27	ea	150.00	4,050		
73	<u>Piers/Pilasters</u>						
74	Formwork	5,832	sf	22.00	128,304		
75	Re-bar	37,750	lbs	1.40	52,850		
76	Concrete material	151	cy	130.00	19,630		
77	Placing concrete	151	cy	160.00	24,160		
78	Thickened slab at interior load bearing walls	111	cy	350.00	38,850		
79							
80	070001 WATERPROOFING, DAMPPROOFING AND CAULKING						
81	Dampproofing at brick shelf	8,008	sf	3.00	NR		
82	Waterproofing to retaining wall	8,415	sf	8.00	67,320		
83							
84	072100 THERMAL INSULATION						
85	Insulation	16,423	sf	3.00	49,269		
86							
87	312000 EARTHWORK						
88	<u>Strip footings</u>						
89	Excavation					w/ lowest slab	
90	Remove off site					w/ lowest slab	
91	Backfill with selected material					w/ lowest slab	
92	<u>Spread footings</u>						
93	Excavation					w/ lowest slab	
94	Remove off site					w/ lowest slab	
95	Backfill with selected material					w/ lowest slab	
96	<u>Miscellaneous</u>						
97	Gravel fill beneath footings, 12"					w/ lowest slab	
98	Perimeter drain	2,563	lf	22.00	56,386		
99	Underslab drainage and waterproofing system				Not yet determined		
100	Underslab E&B for plumbing	154,606	sf	1.00	154,606		
101	Dewatering for foundation work	1	ls	50,000.00	50,000		
102	SUBTOTAL						3,396,260

A1020 SPECIAL FOUNDATIONS

No work in this section

SUBTOTAL

-

A1030 LOWEST FLOOR CONSTRUCTION

109	At building footprint; include credit for selling processed rock	136,000	cy	10.00	1,360,000		
110	To design subgrade of site; include credit for selling processed rock	169,000	cy	10.00	w/ site		
111	Trench; for utility lines	1,250	cy	65.00	w/ site		
112	Rock excavation/hauling to stockpile location	136,000	cy	7.00	952,000		
113	Process and stockpile for reuse on site x1.65 (2" minus)	15,510	tns	7.00	w/ site		
114	Process and stockpile for reuse within building footprint incl. 12" of structural below SOG x1.65 (2" minus) - 31,200cy	51,480	tns	7.00	360,360		
115	Pre split face; for exposed rock slopes; allowance	5,000	sf	9.78	w/ site		
116	Disposal premium; risk of not selling 50% of rock left	52,400	cy	20.00	1,048,000		
117	<u>Building Earthwork</u>						
118	Fill below footprint- reuse processed rock	31,200	cy	12.00	374,400		
119	<u>New Slab on grade, 5" thick</u>	154,606	sf				
120	Excavation and backfill					see Sitework	



PSR Estimate

GFA

373,653

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION C3 NEW BUILDING - 1600 STUDENTS

121	Rigid insulation, underslab	154,606	sf	2.25	347,864		
122	Vapor barrier	154,606	sf	1.00	154,606		
123	Compact existing sub-grade	154,606	sf	0.50	77,303		
124	Mesh reinforcing 15% lap	177,797	sf	1.10	195,577		
125	Concrete - 5" thick; 4,000 psi	2,525	cy	135.00	340,875		
126	Placing concrete	2,525	cy	45.00	113,625		
127	Finishing and curing concrete	154,606	sf	2.50	386,515		
128	Control joints - saw cut	154,606	sf	0.10	15,461		
129	<u>Miscellaneous</u>						
130	Elevator pit, 24" mat foundation w/ 12" concrete wall	3	ea	35,000.00	105,000		
131	Loading dock	1	ls	40,000.00	40,000		
132	Equipment pads	1	ls	15,000.00	15,000		
133	SUBTOTAL					5,886,586	

TOTAL - FOUNDATIONS**\$9,282,846****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**

16.66 lbs/sf

B1010 FLOOR CONSTRUCTION

3,113 tns

Floor Structure - Steel:

Steel beams and columns, 15-22#/SF

1,883 tns 3,800.00 7,155,400

Shear studs

43,809 ea 2.50 109,523

Floor Structure

3", 18ga Metal galvanized floor Deck

219,047 sf 4.00 876,188

WWF reinforcement

251,904 sf 1.10 277,094

Concrete fill to metal deck; total depth 5-1/4" light weight

3,727 cy 175.00 652,225

Place and finish concrete

219,047 sf 3.00 657,141

Rebar to decks

65,714 lbs 1.20 78,857

Misc. angles

219,047 sf 0.50 109,524

Mezzanine

1.20

Steel beams and columns, 15#/SF

150 tns 3,800.00 570,000

Shear studs

4,000 ea 2.50 10,000

3", 18ga Metal galvanized floor Deck

20,000 sf 4.00 80,000

WWF reinforcement

23,000 sf 1.10 25,300

Concrete fill to metal deck; total depth 5-1/4" light weight

340 cy 175.00 59,500

Place and finish concrete

20,000 sf 3.00 60,000

Rebar to decks

6,000 lbs 1.20 7,200

Misc. angles

20,000 sf 0.50 10,000

Miscellaneous

Fire proofing to columns and beams

239,047 sf 2.50 597,618

Fire stopping floors

1 ls 10,000.00 10,000

SUBTOTAL

11,345,570



Northeast Metropolitan Regional Vocational High School

PSR Design Options
Wakefield, MA

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373,653

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION C3 NEW BUILDING - 1600 STUDENTS

B1020 ROOF CONSTRUCTION

Roof Structure - Steel:

Steel beams and columns at roof, 13-18#/SF **1,230** tns 3,800.00 4,674,000

Roof Structure

3" 20 Ga. galvanized metal roof deck **170,067** sf 3.50 595,235

Premium for acoustic deck at gym, cafeteria, auditorium **28,000** sf 7.00 196,000

Miscellaneous

Roof screen support **80** tns 5,000.00 400,000

Concrete at mechanical equipment/ vegetated roof **20,000** sf 10.00 200,000

Intumescent paint **1** ls 50,000.00 50,000

Fire proofing to columns, beams and deck **142,067** sf 3.00 426,201

SUBTOTAL 6,541,436

TOTAL - SUPERSTRUCTURE

\$17,887,006

B20 EXTERIOR CLOSURE

B2010 EXTERIOR WALLS

Exterior Wall Area **119,944** sf

79,163 sf

042000 MASONRY

CMU veneer - large format, Arriscraft **11,994** sf 48.00 575,712

CMU back up **11,994** sf 30.00 359,820

Staging/Lifts to exterior wall **79,163** sf 4.00 316,652

055000 MISC. METALS

Sign at main entrance **1** ls 10,000.00 10,000

Misc. metals at masonry **23,988** sf 1.50 35,982

070001 WATERPROOFING, DAMPPROOFING AND CAULKING

Air barrier **79,163** sf 7.50 593,723

Air barrier/flashing at windows **23,989** lf 6.25 149,931

Miscellaneous sealants to closure **79,163** sf 1.00 79,163

072100 THERMAL INSULATION

Insulation **79,163** sf 3.50 277,071

076400 CLADDING

Metal panel **23,989** sf 75.00 1,799,175

High performance concrete panel **43,180** sf 90.00 3,886,200

Soffit at overhang, including framing **5,500** sf 90.00 495,000

Roof equipment screen - allow **10,000** sf 70.00 700,000

092900 GYPSUM BOARD ASSEMBLIES

6" CFMF backup **23,989** sf 12.00 287,868

Gypsum Sheathing **23,989** sf 2.75 65,970

Drywall lining to interior face of stud backup **23,989** sf 3.50 83,962

Furring to inside face of retaining walls **8,415** sf 7.00 58,905

SUBTOTAL 9,775,134

B2020 WINDOWS

Exterior Glazed Area **40,782** sf

061000 ROUGH CARPENTRY

Wood blocking at openings **23,989** lf 12.00 287,868

070001 WATERPROOFING, DAMPPROOFING AND CAULKING



PSR Estimate

GFA

373,653

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
OPTION C3 NEW BUILDING - 1600 STUDENTS							
237	Backer rod & double sealant	23,989	lf	9.00	215,901		
238							
239	o80001 METAL WINDOWS						
240	Curtainwall, double glazed	17,992	sf	120.00	2,159,040		
241	Storefront, double glazed	17,992	sf	95.00	1,709,240		
242	Sunshades; allow	1	ls	200,000.00	200,000		
243							
244	o84500 INSULATED TRANSLUCENT PANELS						
245	Translucent wall panels	4,798	sf	90.00	431,820		
246							
247	o89000 LOUVERS						
248	Louvers	250	sf	65.00	16,250		
249	SUBTOTAL					5,020,119	
250							
251	B2030 EXTERIOR DOORS						
252	Glazed entrance doors including frame and hardware; double door	12	pr	9,000.00	108,000		
253	Glazed entrance doors including frame and hardware; single door	12	ea	4,500.00	54,000		
254	HM doors, frames and hardware- Double	6	ea	2,000.00	12,000		
255	Overhead doors	8	ea	12,000.00	96,000		
256	Backer rod & double sealant	360	lf	9.00	3,240		
257	Wood blocking at openings	360	lf	3.00	1,080		
258	SUBTOTAL					274,320	
259							
260	TOTAL - EXTERIOR CLOSURE						\$15,069,573
261							
262							
263	B30 ROOFING						
264							
265	B3010 ROOF COVERINGS						
266	PVC membrane system	170,067	sf	22.00	3,741,474		
267	Roof edge at membrane roofing	2,900	lf	50.00	145,000		
268	Miscellaneous flashings, accessories etc.	170,067	sf	1.00	170,067		
269	Perimeter blocking and sealants	170,067	sf	1.50	255,101		
270	Allowance for soffits/ overhangs	170,067	sf	3.00	510,201		
271	Premium for vegetated roof/patio	10,000	sf	35.00	350,000		
272	SUBTOTAL					5,171,843	
273							
274	B3020 ROOF OPENINGS						
275	Skylights	6,240	sf	150.00	936,000		
276	Roof hatch	2	loc	2,500.00	5,000		
277	SUBTOTAL					941,000	
278							
279	TOTAL - ROOFING						\$6,112,843
280							
281							
282	C10 INTERIOR CONSTRUCTION						
283							
284	C1010 PARTITIONS						
285	Miscellaneous partitions - glazing, CMU, GWB assemblies, etc.	373,653	gsf	32.00	11,956,896		
286	SUBTOTAL					11,956,896	
287							
288	C1020 INTERIOR DOORS						
289	Doors; complete	373,653	gsf	6.00	2,241,918		
290	SUBTOTAL					2,241,918	
291							
292	C1030 SPECIALTIES / MILLWORK						
293	Specialties	373,653	gsf	7.50	2,802,398		
294	SUBTOTAL					2,802,398	
295							
296	TOTAL - INTERIOR CONSTRUCTION						\$17,001,212
297							
298							



PSR Estimate

GFA

373,653

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION C3 NEW BUILDING - 1600 STUDENTS

C20 STAIRCASES

C2010 STAIR CONSTRUCTION

Feature stairs, 1-2	1	flt	60,000.00	60,000	
Egress stairs	10	flt	40,000.00	400,000	
SUBTOTAL					460,000

C2020 STAIR FINISHES

High performance coating to stairs including all railings etc.	11	flt	3,000.00	33,000	
Precast terrazzo treads and risers	280	lf	120.00	33,600	
Rubber tile at stairs - landings	1,100	sf	16.00	17,600	
Rubber tile at stairs - treads & risers	1,650	lft	22.00	36,300	
SUBTOTAL					120,500

TOTAL - STAIRCASES

\$580,500

C30 INTERIOR FINISHES

C3010 WALL FINISHES

Wall finishes	373,653	sf	12.00	4,483,836	
SUBTOTAL					4,483,836

C3020 FLOOR FINISHES

Carpet	21,545	sf	5.50	118,498	
Rubber tile	49,800	sf	12.00	597,600	
Linoleum tile	124,523	sf	6.00	747,138	
Premium for acoustic cushioning at upper level classrooms	84,500	sf	3.00	253,500	
Sheet vinyl	12,150	sf	7.00	85,050	
Ceramic tile	4,000	sf	24.00	96,000	
Athletic performance wood	12,660	sf	18.00	227,880	
Vented base	450	lf	8.00	3,600	
Wood sprung floor	2,980	sf	22.00	65,560	
Epoxy terrazzo with integral base	20,370	sf	40.00	814,800	
Poured epoxy	11,100	sf	16.00	177,600	
Epoxy paint	77,160	sf	2.50	192,900	
Resilient base	1	ls	50,000.00	50,000	
Moisture mitigation				NIC	
SUBTOTAL					3,430,126

C3030 CEILING FINISHES

ACT, 2 x 2	49,800	sf	6.00	298,800	
ACT, 2 x 2; High NRC	10,500	sf	7.50	78,750	
ACT, 2 x 4; High NRC	140,533	sf	7.00	983,731	
GWB; MR	11,450	sf	15.00	171,750	
GWB soffits, allow	1	ls	350,000.00	350,000	
Acoustic separation; GWB, resilient hangers, insulation	72,800			NR	
Painted structure	99,655	sf	2.00	199,310	
Specialty ceiling @ cafeteria	9,100	sf	50.00	455,000	
Vertical blade ceiling w/ ACT grid @ Culinary restaurant	3,000	sf	40.00	120,000	
Specialty metal ceiling w/ ACT grid @ Cosmetology	6,150	sf	40.00	246,000	
Premium ACT/GWB @ Media	6,100	sf	25.00	152,500	
Auditorium clouds	1	ls	150,000.00	150,000	
SUBTOTAL					3,205,841

TOTAL - INTERIOR FINISHES

\$11,119,803

D10 CONVEYING SYSTEMS

D1010 ELEVATOR

Elevator; 4 stop	1	ea	240,000.00	240,000	
Elevator; 3 stop	2	ea	180,000.00	360,000	
SUBTOTAL					600,000



PSR Estimate

GFA 373,653

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION C3 NEW BUILDING - 1600 STUDENTS

TOTAL - CONVEYING SYSTEMS	\$600,000
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D20 PLUMBING

D20 PLUMBING, GENERALLY

Service entrance, equipment, fixtures and piping.

373,653 sf 19.50 7,286,234

SUBTOTAL

7,286,234

TOTAL - PLUMBING	\$7,286,234
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D30 HVAC

D30 HVAC, GENERALLY

HVAC primarily all electric, air source heat pumps, VRF, and
gas fired hot water boiler to pre-heat RTU's
SUBTOTAL

373,653 sf 62.00 23,166,486

23,166,486

TOTAL - HVAC	\$23,166,486
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D40 FIRE PROTECTION

D40 FIRE PROTECTION, GENERALLY

Install new service loop, fire pump and branch FP distribution
SUBTOTAL

373,653 sf 6.50 2,428,745

2,428,745

TOTAL - FIRE PROTECTION	\$2,428,745
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D50 ELECTRICAL

Normal power service & distribution 5000A

373,653 sf 5.00 1,868,265

Generator gear and distribution 600KW

373,653 sf 3.50 1,307,786

PV rough-in only

Equipment wiring

373,653 sf 3.50 1,307,786

Lighting, controls and circuitry

373,653 sf 10.00 3,736,530

Branch devices and circuitry

373,653 sf 3.50 1,307,786

Fire alarm including BDA

373,653 sf 3.50 1,307,786

Technology system

373,653 sf 2.00 747,306

Theater lighting systems

1 ls 200,000.00 200,000

Security system

373,653 sf 1.00 373,653

Miscellaneous electrical

373,653 sf 4.00 1,494,612

SUBTOTAL

13,651,510

Communications cabling and equipment allowance provided

1 ls 1,739,625.00 1,739,625

A/V cabling allowance provided

1 ls 104,000.00 104,000

IPTV and video pn demand allowance provided

1 ls 360,000.00 360,000

Gym A/V allowance provided

1 ls 128,000.00 128,000

Auditorium/stage A/V allowance provided

1 ls 148,000.00 148,000

Cafeteria/Stage A/V allowance provided

1 ls 148,000.00 148,000

Fitness Center A/V allowance provided

1 ls 15,500.00 15,500

Weights A/V allowance provided

1 ls 15,500.00 15,500

Speech Reinforcement allowance provided

1 ls 244,200.00 244,200

Instructional A/V allowance provided

1 ls 650,000.00 650,000

PA System allowance provided

1 ls 218,200.00 218,200

Clock System allowance provided

1 ls 126,300.00 126,300

SUBTOTAL

3,897,325

Security system allowance provided

1 ls 1,297,200.00 1,297,200

SUBTOTAL

1,297,200

TOTAL - ELECTRICAL	\$18,846,035
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PSR Estimate

GFA

373,653

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION C3 NEW BUILDING - 1600 STUDENTS

E10 EQUIPMENT**E10 EQUIPMENT, GENERALLY**

Tavares Design, 10.30.2020

Food service equipment	1	ls	825,000.00	825,000	
Basketball backstops	1	ls	27,000.00	27,000	
Stage curtains and rigging	1	ls	650,000.00	650,000	
Divider curtains	1	ls	32,000.00	32,000	
Gym wall padding	1	ls	25,000.00	25,000	
Telescoping bleachers	1	ls	215,000.00	215,000	
Automotive refinishing - Booths/Frame Machine	1	ls	325,000.00	325,000	
Automotive Tech - lifts	1	ls	160,000.00	160,000	
HVAC/Plumbing - Boilers/Furnaces/Split systems	1	ls	65,000.00	65,000	
Cosmetology - Wet stations/Manicure/Styling	1	ls	110,000.00	110,000	
SUBTOTAL					2,434,000
Gymnasium dividing net; electrically operated	1	ls	30,000.00	30,000	
Volleyball net and standards	1	ls	5,000.00	5,000	
Wrestling mat lifter	1	ls	12,000.00	12,000	
Scoreboards and shot clock	1	ls	25,000.00	25,000	
Ceiling mounted batting cage	1	ls	2,500.00	2,500	
Culinary equipment - assume part of Food Service above				incl	
Residential appliances	1	ls	50,000.00	50,000	
Electrically operated projection screens				w/ AV	
SUBTOTAL					124,500

TOTAL - EQUIPMENT**\$2,558,500****E20 FURNISHINGS****E2010 FIXED FURNISHINGS**

Entry mats & frames - recessed with carpet/rubber strips	1,000	sf	55.00	55,000	
Window treatments including premium for motorized at Cafeteria & Gymnasium	40,782	sf	7.00	285,474	
Fixed casework and Equipment, Tavares Design, 10.30.2020	1	ls	1,225,000.00	1,225,000	
Auditorium seating	750	seats	310.00	232,500	
SUBTOTAL					1,797,974

E2020 MOVABLE FURNISHINGS

All movable furnishings to be provided and installed by owner

SUBTOTAL					NIC
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TOTAL - FURNISHINGS**\$1,797,974****F10 SPECIAL CONSTRUCTION****F10 SPECIAL CONSTRUCTION**

No items in this section

SUBTOTAL

TOTAL - SPECIAL CONSTRUCTION**F20 SELECTIVE BUILDING DEMOLITION****F2010 BUILDING ELEMENTS DEMOLITION**

No items in this section

SUBTOTAL

F2020 HAZARDOUS COMPONENTS ABATEMENT



PSR Estimate

GFA 373,653

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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OPTION C3 NEW BUILDING - 1600 STUDENTS

See main summary for HazMat allowance

See Summary

SUBTOTAL

TOTAL - SELECTIVE BUILDING DEMOLITION

SUBTOTAL OPTION C3

\$133,737,757



PSR Estimate

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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SITWORK OPTION 3C

G SITEWORK

1,500,000 sf Affected site area

G10 SITE PREPARATION & DEMOLITION

Site construction fence/barricades	9,430	lf	16.00	150,880
Site construction fence gates and construction entrance	2	ea	10,000.00	20,000
Police details	1	ls	25,000.00	25,000
Pavement/curbing removal	276,600	sf	1.25	345,750
Clear trees, remove all stumps etc. - allow	15	acre	8,000.00	120,000
Construction laydown area	1	ls	10,000.00	10,000
Miscellaneous demolition including utilities	1	ls	200,000.00	200,000
SUBTOTAL				871,630

Earthwork

Pre-blast survey	1	ls	100,000.00	100,000
<u>Topsoil handling</u>				
Strip topsoil and forest organics and remove off-site	21,730	cy	16.00	347,680
<u>Drilling/matting/blasting - phase 1</u>				
At building footprint; include credit for selling processed rock	136,000	cy	10.00	w/ building
To design subgrade of site; include credit for selling processed rock	169,000	cy	10.00	1,690,000
Trench; for utility lines	1,250	cy	65.00	81,250
Rock excavation/hauling to stockpile location	170,250	cy	7.00	1,191,750
Process and stockpile for reuse on site x1.65 (2" minus)	15,510	tns	7.00	108,570
Process and stockpile for reuse within building footprint incl. 12" of structural below SOG x1.65 (2" minus) - 31.200cy	51,480	tns	7.00	w/ building
Pre split face; for exposed rock slopes; allowance	5,000	sf	9.78	48,900
Disposal premium; risk of not selling 50% of rock left	80,425	cy	20.00	1,608,500
Credit for reuse of 25% of the proposed gravel base	2,917	cy	(22.00)	(64,174)

Building Earthwork

Fill below footprint- reuse processed rock	31,200	cy	12.00	w/ building
<u>Site Earthwork; limited to phase 1 area</u>				
Fill - reuse processed rock	9,400	cy	12.00	112,800
<u>Drilling/matting/blasting - phase 2</u>				
To design subgrade of site; include credit for selling processed rock	131,000	cy	10.00	1,310,000
Trench; for utility lines	1,250	cy	65.00	81,250
Rock excavation/hauling to stockpile location	132,250	cy	7.00	925,750
Process and stockpile for reuse on site x1.65 (2" minus)	118,635	tns	7.00	830,445
Pre split face; for exposed rock slopes; allowance	5,000	sf	9.78	48,900
Disposal premium; risk of not selling 50% of rock left	29,550	cy	20.00	591,000

Site Earthwork

Fill - reuse processed rock	71,900	cy	12.00	862,800
Groundwater management/ control measures	5	mths	20,000.00	100,000
Fine grading	79,116	sy	2.25	178,011

Hazardous Waste Remediation

Remove existing underground fuel storage tanks assume not required
Dispose/treat contaminated soils assume not required

Erosion Control

Silt fence/erosion control, wash bays, stock piles	9,430	lf	12.00	113,160
Inlet protection; allow	20	ea	250.00	5,000
Slope protection; allow	1	ls	25,000.00	25,000
Tree protection; allow	500	lf	10.00	5,000
Wheel wash stations	1	ls	15,000.00	15,000
Silt fence maintenance and monitoring	1	ls	30,000.00	30,000

SUBTOTAL				10,346,592
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G20 SITE IMPROVEMENTS



PSR Estimate

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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SITEWORK OPTION 3C

56	<u>Asphalt Paving; parking lot and roadway</u>	291,200	sf				
57	gravel base; 12" thick	10,785	cy	40.00	431,400		
58	asphalt; 4" thick	7,207	tns	120.00	864,840		
59	Granite curbing	14,225	lf	42.00	597,450		
60	Parking lines	436	spc	85.00	37,060		
61	<u>Access drive for maintenance of fields</u>	3,765	sf		-		
62	gravel base; 12" thick	139	cy	40.00	5,560		
63	asphalt; 4" thick	93	tns	120.00	11,160		
64	Patching for utility work	7,915	sf	2.50	19,788		
65	Other road markings	1	ls	10,000.00	10,000		
66	HC curb cuts - allow	15	loc	850.00	12,750		
67	SUBTOTAL					1,990,008	

68	<u>Pedestrian Paving</u>						
69	<u>Concrete walks</u>	20,925	sf				
70	gravel base, 8"	519	cy	40.00	20,760		
71	4" concrete paving (sidewalks)	20,925	sf	12.00	251,100		
72	<u>Access ramp to football field</u>	3,560	sf				
73	gravel base, 8"	88	cy	40.00	3,520		
74	4" concrete paving (sidewalks)	3,560	sf	12.00	42,720		
75	<u>Access walkway to lower fields</u>	5,460	sf				
76	gravel base, 8"	135	cy	40.00	5,400		
77	4" concrete paving (sidewalks)	5,460	sf	12.00	65,520		
78	Stairs	330	lf	225.00	74,250		
79	Handrails at stairs	106	lf	275.00	29,150		
80	Dumpster/ Equipment pads	1	ls	10,000.00	10,000		
81	Building access plaza	1	ls	250,000.00	250,000		
82	SUBTOTAL					752,420	

84	<u>Intersection Work</u>						
85	Traffic Signal and intersection work	1	ls	1,500,000.00	1,500,000		
86	SUBTOTAL					1,500,000	

88	<u>Site Furnishings</u>						
89	Site furnishings allowance (trash, bench, bike racks etc.)	1	ls	50,000.00	50,000		
90	Pre-K Playground allowance	1	ls	125,000.00	125,000		
91	SUBTOTAL					175,000	

93	<u>Stadium; Synthetic</u>						
94	Synthetic turf football field; brockfil w_sp-17	78,000	sf	8.00	624,000		
95	Sports netting allowance	1	ls	20,000.00	20,000		
96	Football goal posts	1	sets	29,000.00	29,000		
97	Bleachers	954	seats	400.00	381,600		
98	Press box	1	ls	65,000.00	65,000		
99	Press box lift	1	loc	50,000.00	50,000		
100	Running track pavement; reclaim and repave	58,800	sf	4.50	264,600		
101	Running track surface	6,533	sf	45.00	293,985		
102	Walking track surrounding running track	13,400	sf	5.00	67,000		
103	Turf anchor curb; d-area	400	lf	85.00	34,000		
104	Shot put pad & throwing area	1	ea	30,000.00	30,000		
105	Triple jump/Long jump event	2	ea	25,000.00	50,000		
106	Track fence - assume 4'ht CLF	1,500	lf	50.00	75,000		
107	Fence - assume 4'ht CLF - single gate	3	ea	800.00	2,400		
108	Fence - assume 4'ht CLF - double gate	3	ea	1,000.00	3,000		
109	SUBTOTAL					1,989,585	

111	<u>Baseball field; Natural Renovation</u>						
112							



Northeast Metropolitan Regional Vocational High School
PSR Design Options
Wakefield, MA

02-Dec-20

PSR Estimate

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
	SITEWORK OPTION 3C						
113	Amend natural grass @ baseball field; allowance	93,985	sf	0.75	70,489		
114	Skinned infield @ baseball field	10,890	sf	3.00	32,670		
115	Foul poles	2	loc	3,600.00	7,200		
116	Home plates incl. fortification	1	loc	3,500.00	3,500		
117	Pitchers mound/rubber incl. fortification	1	loc	7,500.00	7,500		
118	Bases	1	ls	2,000.00	2,000		
119	Line markings - allowance	1	ls	5,000.00	5,000		
120	Baseball backstop -per narrative	1	ea	50,000.00	50,000		
121	Fence - assume 4'ht CLF with safety cap	840	lf	55.00	46,200		
122	Fence - assume 4'ht CLF - single gate	3	ea	650.00	1,950		
123	Fence - assume 4'ht CLF - double gate	1	ea	1,000.00	1,000		
124	Baseball scoreboard	1	loc	25,000.00	25,000		
125	Baseball dugouts	2	ea	20,000.00	40,000		
126	Bullpen allowance	2	ea	10,000.00	20,000		
127	Irrigation	93,985	sf	1.25	117,481		
128	SUBTOTAL					429,990	
129							
130	<u>Softball field- Soccer overlay; Synthetic</u>						
131	Synthetic turf softball field; brockfil w_sp-17	101,620	sf	8.00	812,960		
132	Turf anchor curbing for soccer/softball	1,260	lf	85.00	107,100		
133	Softball backstop	1	ls	35,000.00	35,000		
134	Softball dugout	2	ea	20,000.00	40,000		
135	Foul poles	2	ea	3,600.00	7,200		
136	Fence - assume 4'ht CLF with safety cap	1,260	lf	55.00	69,300		
137	Fence - assume 4'ht CLF - single gate	6	ea	650.00	3,900		
138	Fence - assume 4'ht CLF - double gate	2	ea	1,000.00	2,000		
139	Soccer goals	2	ea	12,500.00	25,000		
140	Soccer/softball scoreboard	1	loc	25,000.00	25,000		
141	SUBTOTAL					1,127,460	
142							
143	<u>Tennis courts</u>						
144	Tennis court paving and surfacing	35,925	sf	6.00	215,550		
145	Tennis court fencing and standards	5	ea	45,000.00	225,000		
146	SUBTOTAL					440,550	
147							
148	<u>Site Walls</u>						
149	Precast block retaining wall	1,120	lf	250.00	280,000		
150	Climbing wall	75	lf	400.00	30,000		
151	SUBTOTAL					310,000	
152							
153	<u>Landscaping</u>						
154	Import topsoil; swell 25%	11,921	cy	60.00	715,260		
155	Lawn - seed	515,000	sf	0.35	180,250		
156	Trees	183	ea	1,200.00	219,600		
157	Planting allowance including planting soils and mulch	1	ls	250,000.00	250,000		
158	Irrigation	515,000	sf	1.25	643,750		
159	SUBTOTAL					2,008,860	
160							
161	G30 CIVIL MECHANICAL UTILITIES						
162	<u>Water supply; Pricing includes E&B and bedding</u>						
163	8" CLDI	5,945	lf	125.00	743,125		
164	Gate valves (allow)	18	ea	1,500.00	27,000		
165	Connect to existing	2	loc	12,500.00	25,000		
166	FD connection (assume)	1	ea	2,000.00	2,000		
167	Fire hydrant	16	ea	6,500.00	104,000		
168	Thrust blocks	29	ea	850.00	24,650		
169	SUBTOTAL					925,775	



Northeast Metropolitan Regional Vocational High School
PSR Design Options
Wakefield, MA

02-Dec-20

PSR Estimate

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
	SITework OPTION 3C						
170	<u>Sanitary; Pricing includes E&B and bedding</u>						
171	6" PVC	3,045	lf	80.00	243,600		
172	Manholes	25	ea	4,500.00	112,500		
173	Grease trap, 10,000 gal.	1	ea	50,000.00	50,000		
174	Pipe cleaning and relining	1,550	lf	70.00	108,500		
175	SUBTOTAL					514,600	
176	<u>Storm water; Pricing includes E&B and bedding</u>						
177	12" HDPE	6,305	lf	80.00	504,400		
178	24" HDPE	2,540	lf	110.00	279,400		
179	AD	15	ea	3,500.00	52,500		
180	CB	55	ea	4,200.00	231,000		
181	DMH	50	ea	4,500.00	225,000		
182	WQI	6	ea	12,000.00	72,000		
183	Stadium field drainage allowance; includes track drains	1	ls	175,000.00	175,000		
184	Softball field drainage allowance	1	ls	100,000.00	100,000		
185	Subsurface infiltration system #1 (Softball/Soccer)	45,950	sf	40.00	1,838,000		
186	Subsurface infiltration system #2 (Football)	46,590	sf	40.00	1,863,600		
187	Subsurface infiltration system #3	5,000	sf	40.00	200,000		
188	Subsurface infiltration system #4	2,100	sf	40.00	84,000		
189	SUBTOTAL					5,624,900	
190	<u>Gas service</u>						
191	E&B trench for new gas pipe (allow)	500	lf	35.00	17,500		
192	SUBTOTAL					17,500	
193	G40 ELECTRICAL UTILITIES						
194	<u>Civil</u>						
195	Concrete work for duct banks	1,500	lf	35.00	52,500		
196	Transformer pad / generator pad	2	ea	2,500.00	5,000		
197	Excavation & backfill for duct banks and site lighting	1,500	lf	30.00	45,000		
198	Utility co. backcharges, allow					By Owner	
199	<u>Power & Communications</u>						
200	Primary and communications duct bank	1,500	lf	170.00	255,000		
201	Secondary and generator duct bank	100	lf	500.00	50,000		
202	Press box including feeder	1	ls	50,000.00	50,000		
203	Concessions building including feeder	1	ls	50,000.00	50,000		
204	Electrical to maintenance Building	1	ls	50,000.00	50,000		
205	Electrical to athletic Building	1	ls	50,000.00	50,000		
206	<u>Site Lighting</u>						
207	Parking/ Roadway area lighting (allow)	294,965	sf	2.50	737,413		
208	Athletic field lighting; Stadium field	1	ls	540,000.00	540,000		
209	Athletic field lighting; Tennis Courts	1	ls	270,000.00	270,000		
210	Score board including feeders	3	ea	100,000.00	300,000		
211	<u>Electric Vehicle Charging Station</u>						
212	EVCS provisions only	1	ea	10,000.00	10,000		
213	<u>Site Security</u>						
214	CCTV surveillance at site	1	ls	100,000.00	100,000		
215	<u>Site Demolition</u>						
216	Site demolition and make safe	1	ls	10,000.00	10,000		
217	SUBTOTAL					2,574,913	
218	TOTAL - SITE DEVELOPMENT						\$31,599,783