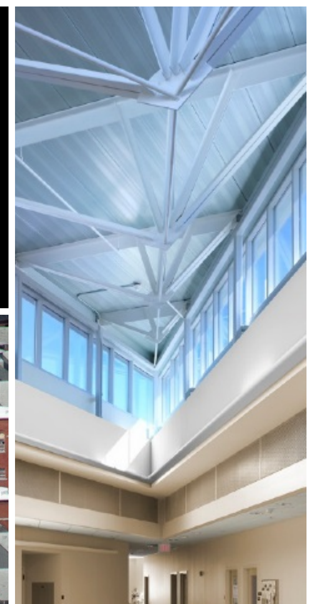
Dover High School & Career Technical Center

# DOVER SCHOOL DISTRICT

May 24, 2016





CONSTRUCTION

# Design Development Estimate

CONSTRUCTION | AT PC WE GO ABOVE AND BEYOND ON EVERY JOB, PERIOD.

May 24, 2016

Dr. Elaine M. Arbour, Ed.D.
Superintendent of Schools
The Dover School District – School Administrative Unit #11
McConnell Center
61 Locust Street, Suite 409
Dover, NH 03820-4132

Re: Dover School District – Dover High School & Career Technical Center
PC Project #15027

Dr. Arbour:

On behalf of the entire PC Construction team, thank you for the opportunity to provide preconstruction services to support your project. We have developed a Design Development estimate in the amount of $71,644,000.

In producing the current Design Development estimate, the project team has worked through a value engineering process to insure that the project remains within budget while maintaining an expected level of quality. The value engineering items were voted on by the JBC on May 10 and are outlined in the Value Engineering Log included in Section 3 of this estimate.

It has been a pleasure working with you and your team during the development of this estimate. We are available at your convenience to review our estimate and answer any questions you may have. We look forward to working with the Dover School District and your entire team on this exciting project.

Sincerely,

Joseph Picoraro
Vice President

cc: Scott Eastman
Jay Fayette

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Dover High School

**Design Development Estimate**

# ESTIMATE SUMMARY

PC Construction Company
193 Tilley Drive
So. Burlington, VT 05403

Date : 5/24/2016
Project # : 15027
Duration (in months) : 38
Size : 310,380 SF

| | | | |
|---|---|---|---|
| Direct costs | | | $66,908,293 |
| | Material sales tax | 0.00% | $0 |
| Gross cost | | | $66,908,293 |
| | Escalation | 0.00% | $0 |
| | Gross receipts tax | 0.00% | $0 |
| | Builder's risk insurance | 0.07% | $50,151 |
| | Liability insurance | 0.75% | $537,330 |
| | Construction manager contingency | 3.00% | $2,007,249 |
| | P & P Bond | $393,648 | $393,648 |
| | Sub Total | | $69,896,671 |
| | CM Fee | 2.50% | $1,747,417 |
| Total | | | $71,644,000 |

# Dover High School - Design Development

CONSTRUCTION

Job #: 15027
Project Size: 310380 SF
Recap - With Taxes and Insurance

Estimator: KN, JB, MT, AM
Group 1: *MIsc Tag

| Item Code | Description | Quantity | UM | Total UnitCost | Total Cost |
|---|---|---|---|---|---|
| | Animal Barn/Science Building | 3,609 | | 332.17 | 1,198,789 |
| | Courtyard | | | | 314,875 |
| | High School | | | | 65,394,629 |
| | Round Pen | 3,899 | | | |
| | Total Gross Cost | | | | 66,908,293 |

# Dover High School - Design Development

CONSTRUCTION

Job #: 15027
Project Size: 310380 SF
Recap - With Taxes and Insurance

Estimator: KN, JB, MT, AM
Group 1: Major ItemCode Groups

| Item Code | Description | Quantity | UM | Total UnitCost | Total Cost |
|---|---|---|---|---|---|
| | **00 - PRECONSTRUCTION SERVICES** | | | | |
| | **01 - BUILDING DESIGN** | | | | |
| | **01 - CM GENERAL CONDITIONS** | | | | 3,593,785 |
| | **01 - COST OF WORK GEN REQ'S** | | | | 971,561 |
| | **02 - SITEWORK** | | | | 10,007,306 |
| | **03 - CONCRETE** | | | | 3,386,019 |
| | **03 - PRECAST CONCRETE** | | | | 12,000 |
| | **04 - MASONRY** | | | | 2,762,312 |
| | **05 - METALS** | | | | 8,006,539 |
| | **06 - CARPENTRY** | | | | 502,225 |
| | **07 - THERMAL/MOISTURE PROTECTION** | | | | 2,968,291 |
| | **08 - DOORS AND WINDOWS** | | | | 2,871,278 |
| | **09 - FINISHES** | | | | 7,942,898 |
| | **10 - SPECIALTIES** | | | | 779,615 |
| | **11 - EQUIPMENT** | | | | 1,194,982 |
| | **12 - FURNISHINGS** | | | | 1,205,623 |
| | **13 - SPECIAL CONSTRUCTION** | | | | 154,877 |
| | **14 - CONVEYING SYSTEMS** | | | | 185,000 |
| | **15 - PLUMBING** | | | | 2,359,689 |
| | **15 - FIRE PROTECTION** | | | | 996,951 |
| | **15 - HVAC** | | | | 9,249,589 |
| | **16 - ELECTRICAL** | | | | 7,757,754 |
| | **Total Gross Cost** | | | | 66,908,293 |

# Dover High School - Design Development

CONSTRUCTION

Job #: 15027
Project Size: 310380 SF
Detail - With Taxes and Insurance

Estimator: KN, JB, MT, AM
Group 1: Major ItemCode Groups
Group 2: Minor ItemCode Groups

| Item Code | Description | Quantity | UM | Total UnitCost | Total Cost |
|---|---|---|---|---|---|
| | **00 - PRECONSTRUCTION SERVICES** | | | | |
| | **ESTIMATING** | | | | |
| 0060.002 | Precon Services - N/A (Included under separate contract) | | | | |
| | **** Total ESTIMATING** | | | | |
| | *** Total 00 - PRECONSTRUCTION SERVICES** | | | | |
| | **01 - BUILDING DESIGN** | | | | |
| | **BUILDING DESIGN** | | | | |
| 0080.100 | ***DESIGN & ENGINEERING FEES BY CITY OF DOVER*** | | | | |
| | **** Total BUILDING DESIGN** | | | | |
| | *** Total 01 - BUILDING DESIGN** | | | | |
| | **01 - CM GENERAL CONDITIONS** | | | | |
| | **CM GENERAL CONDITIONS** | | | | |
| 0100.000 | Mobilize / Demobilize | 1 | LS | 28,000.00 | 28,000 |
| 0100.020 | Office Supplies | 167 | WK | 225.00 | 37,575 |
| 0100.030 | Office Furniture / Systems | 1 | LS | 48,000.00 | 48,000 |
| 0100.040 | Engineer's Furniture / Equipment - N/A | | LS | | |
| 0100.041 | Engineer's Computer / Software - N/A | | LS | | |
| 0100.045 | Project Kiosk 30" - Purchase | 2 | EA | 5,000.00 | 10,000 |
| 0100.060 | Janitorial Services | 167 | WK | 50.00 | 8,350 |
| 0100.064 | Temporary Wiring | 1 | LS | 5,000.00 | 5,000 |
| 0100.065 | Electrical Energy Costs (By Owner) | | MO | 350.00 | |
| 0100.066 | Water Usage Costs | 38 | MO | 200.00 | 7,600 |
| 0100.100 | Telephone / Communication | 38 | MO | 900.00 | 34,200 |
| 0100.110 | Sanitary / Facilities | 38 | MO | 1,000.00 | 38,000 |
| 0110.080 | Security / Watchman | | WK | | |
| 0110.120 | Photographs | | MO | | |
| 0110.160 | Documents & Reproductions | 1 | LS | 15,000.00 | 15,000 |
| 0120.002 | Estimating - GMP | 1 | LS | 50,000.00 | 50,000 |
| 0120.003 | Officer in Charge | | MW | 7,000.00 | |
| 0120.005 | Construction Executive | 15 | MW | 5,400.00 | 81,000 |
| 0120.008 | Senior Project Manager | 59 | MW | 4,720.00 | 278,480 |
| 0120.010 | Project Manager | 147 | MW | 3,800.00 | 558,600 |
| 0120.018 | Senior Project Engineer | | MW | 2,880.00 | |
| 0120.020 | Project Engineer | 167 | MW | 2,400.00 | 400,800 |
| 0120.022 | Office Engineer | 105 | MW | 1,920.00 | 201,600 |
| 0120.024 | Senior Superintendent | 105 | MW | 4,720.00 | 495,600 |
| 0120.025 | Project Superintendent | 166 | MW | 3,720.00 | 617,520 |
| 0120.034 | Construction Coordination - SCP | 65 | MW | 2,400.00 | 156,000 |
| 0120.050 | Scheduling Engineer | | MW | 2,280.00 | |
| 0120.058 | Safety Manager | | MW | 3,720.00 | |
| 0120.060 | Safety Engineer (2 Days/Week) | 62 | MW | 2,280.00 | 141,360 |
| 0120.220 | Administration | 131 | MW | 1,720.00 | 225,320 |
| 0130.000 | Living Allowance - Management | 271 | MWK | 300.00 | 81,300 |
| 0130.005 | Living Allowance - Foremen | | MWK | 125.00 | |
| 0130.020 | Travel and Expenses | 38 | MO | 600.00 | 22,800 |
| 0140.000 | Scheduling | 1 | WK | 2,280.00 | 2,280 |
| 0140.200 | Permit's & Fee's | | LS | | |
| 0140.205 | Building Permit | | LS | | |
| 0140.800 | Professional Services | | LS | | |
| 0150.200 | Equipment Trucking | | WK | | |
| 0150.250 | Off - Site Parking | | WK | | |
| 0150.500 | Personnel Elevator | | MO | | |
| 0150.520 | Field Office | 38 | TM | 1,000.00 | 38,000 |
| 0150.540 | Engineer / Architect Office | | TM | | |
| 0150.560 | Storage Trailers (2 Trailers) | 76 | TM | 150.00 | 11,400 |
| 0160.300 | Sub Bonds (Include w/ Subs) | | LS | | |

Job #: 15027
Project Size: 310380 SF
Detail - With Taxes and Insurance

Estimator: KN, JB, MT, AM
Group 1: Major ItemCode Groups
Group 2: Minor ItemCode Groups

| Item Code | Description | Quantity | UM | Total UnitCost | Total Cost |
|---|---|---|---|---|---|
| 0180.010 | Gross Receipts Tax | | LS | | |
| 0180.020 | Sales Tax | | LS | | |
| **** Total CM GENERAL CONDITIONS** | | | | | **3,593,785** |
| *** Total 01 - CM GENERAL CONDITIONS** | | | | | **3,593,785** |
| **01 - COST OF WORK GEN REQ'S** | | | | | |
| **COST OF WORK GEN REQ'S** | | | | | |
| 0200.010 | Materials Testing | | LS | | |
| 0200.040 | Snow Removal | 1 | LS | 40,000.00 | 40,000 |
| 0200.110 | Field Engineering | 4 | WK | 5,000.00 | 20,000 |
| 0200.140 | Temporary GWB Partitions | | SF | 7.80 | |
| 0200.160 | ICRA / ILSM - N/A | | LS | | |
| 0200.180 | Scaffolding - In COW | | LS | | |
| 0200.200 | OSHA / First Aid | 155 | WK | 500.00 | 77,500 |
| 0200.300 | Material Handling | 113 | WK | 940.00 | 106,220 |
| 0200.310 | Cranes - In COW | | CM | | |
| 0200.320 | Progress Cleanup (Labor & Dumpster) | 155 | WK | 1,200.00 | 186,000 |
| 0200.330 | Floor Protection | 313,535 | SF | 0.24 | 75,750 |
| 0200.360 | Final Cleanup | 313,535 | SF | 0.45 | 141,091 |
| 0200.400 | Temporary Heat Equipment (Fuel By Owner) | 1 | LS | 175,000.00 | 175,000 |
| 0200.410 | Temporary Enclosure | 1 | LS | 150,000.00 | 150,000 |
| 0200.970 | Support Equipment | | LS | | |
| **** Total COST OF WORK GEN REQ'S** | | | | | **971,561** |
| *** Total 01 - COST OF WORK GEN REQ'S** | | | | | **971,561** |
| **02 - SITEWORK** | | | | | |
| **DEMOLITION** | | | | | |
| 2010.500 | Disassemble Sign & Score Board for Later Use | 2 | EA | 1,132.54 | 2,265 |
| 2010.600 | Remove Existing Batting Cage | 2 | EA | 1,415.68 | 2,831 |
| 2012.010 | Remove Pipe <=10" in Excavation | 5,049 | LF | 4.35 | 21,946 |
| 2012.015 | Remove Electrical Conduit <=10" in Excavation | 3,815 | LF | 4.35 | 16,582 |
| 2012.610 | Remove Catch Basin | 17 | EA | 434.67 | 7,389 |
| 2013.000 | Remove Chain Link Fence | 4,319 | LF | 3.14 | 13,568 |
| 2013.000 | Remove Shot Put Cage | 1 | EA | 1,132.44 | 1,132 |
| 2013.040 | Remove Signage | 10 | EA | 83.77 | 838 |
| 2013.220 | Sawcut Bituminous Concrete Pavement | 882 | LF | 2.00 | 1,764 |
| 2013.240 | Demo Bit Conc Pvmt - Large Area | 144,810 | SF | 0.16 | 23,821 |
| 2013.242 | Demo Bit Conc Pvmt - Walks | 20,710 | SF | 0.13 | 2,725 |
| 2013.250 | Demo Bituminous Concrete Pavement - Prep for Westerly Parking Lot | 41,300 | SF | 0.33 | 13,592 |
| 2013.250 | Demo Bituminous Concrete Pavement - Track Access Road | 45,800 | SF | 0.33 | 15,073 |
| 2013.280 | Demo Conc Walk | 4,446 | SF | 0.63 | 2,793 |
| 2013.300 | Demo Concrete Curb | 35,147 | LF | 1.00 | 35,154 |
| 2013.320 | Demo Concrete Pads | 13 | CY | 30.41 | 395 |
| 2013.400 | Demo Tennis Courts | 15,423 | SF | 0.39 | 6,004 |
| 2013.405 | Demo Existing Dug Outs | 2 | EA | 1,853.81 | 3,708 |
| 2014.210 | Remove Light Pole | 9 | EA | 125.65 | 1,131 |
| 2022.100 | Mass Demolition - High School | 270,000 | SF | 4.63 | 1,250,100 |
| 2022.100 | Mass Demolition - Shed/Barn | 2,960 | SF | 5.00 | 14,800 |
| 2032.310 | Demo Entrance Canopy | 4,600 | SF | 0.68 | 3,129 |
| 2032.500 | Asbestos Abatement - Gym & Auditorium (Allowance) | 1 | LS | 300,000.00 | 300,000 |
| 2032.500 | Asbestos Abatement - High School, Excludes Gym & Auditorium (Allowance) | 1 | LS | 1,000,000.00 | 1,000,000 |
| **** Total DEMOLITION** | | | | | **2,740,742** |
| **PRELIMINARY SITEWORK** | | | | | |
| 2100.000 | Covered Pen Misc Sitework - In FFE Budget | 1 | LS | | |

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Project Size: 310380 SF
Detail - With Taxes and Insurance

Estimator: KN, JB, MT, AM
Group 1: Major ItemCode Groups
Group 2: Minor ItemCode Groups

| Item Code | Description | Quantity | UM | Total UnitCost | Total Cost |
|---|---|---|---|---|---|
| 2110.290 | Misc Erosion Control | 1 | LS | 60,000.00 | 60,000 |
| 2110.306 | Site Access/Laydown | 1 | LS | 35,000.00 | 35,000 |
| 2110.320 | Temporary Site Fencing | 1 | LS | 30,000.00 | 30,000 |
| **** Total PRELIMINARY SITEWORK** | | | | | **125,000** |
| **EARTHWORK** | | | | | |
| 2200.130 | Site Excavation to Stockpile | 28,600 | CY | 9.70 | 277,477 |
| 2200.160 | Site Fill From On-Site (Demolished Wing/Stockpile) | 35,000 | CY | 3.17 | 110,919 |
| 2200.910 | Granular Fill (M) | 2,700 | CY | 14.00 | 37,800 |
| 2208.310 | Structure Fill from Borrow (L) | 2,700 | CY | 3.17 | 8,557 |
| 2210.205 | Structure Excavation | 33,200 | CY | 12.13 | 402,633 |
| 2220.320 | Bio-Retention Area | 24 | CY | 35.00 | 840 |
| 2220.330 | Struct Fill at Agg Piers | 6,900 | CY | 32.50 | 224,218 |
| 2220.332 | Crushed Stone Under Slab - 12" | 405 | CY | 33.87 | 13,717 |
| 2220.332 | Crushed Stone Under Slab - 8" | 7,800 | CY | 33.87 | 264,186 |
| 2220.335 | 3/4" Crushed Stone Material (M) | 112 | CY | 22.00 | 2,464 |
| 2220.335 | BF Frost Wall w/ Structural Fill | 7,380 | CY | 27.87 | 205,681 |
| 2220.340 | BF Frost Wall w/ On Site Matl | 5,700 | CY | 17.51 | 99,807 |
| 2220.348 | Soil Filter - Sand, Sandy Loam, Compost (M) | 143 | CY | 40.00 | 5,720 |
| 2220.412 | Pea Gravel (M) | 48 | CY | 22.00 | 1,056 |
| 2220.420 | Bark Mulch (M) | 24 | CY | 35.00 | 840 |
| **** Total EARTHWORK** | | | | | **1,655,914** |
| **DEWATERING** | | | | | |
| 2300.155 | Dewatering | 1 | LS | 25,000.00 | 25,000 |
| **** Total DEWATERING** | | | | | **25,000** |
| **FOUNDATION PILING** | | | | | |
| 2492.105 | Aggregate Piers (18" Diameter, 20' deep, 8' x 8' Grid) | 72,522 | SF | 10.00 | 725,220 |
| **** Total FOUNDATION PILING** | | | | | **725,220** |
| **STORM DRAINAGE** | | | | | |
| 2500.110 | 4" PVC Building Underdrain Trenching (L) | 6,205 | LF | 6.43 | 39,911 |
| 2500.112 | 4" PVC Building Perimeter Drain Trenching (L) | 3,626 | LF | 6.43 | 23,322 |
| 2500.115 | 4" PVC (M) | 9,831 | LF | 2.00 | 19,662 |
| 2500.170 | Filter Fabric | 33,938 | SY | 1.00 | 33,938 |
| 2500.180 | Stone at Underdrain (M) | 313 | CY | 20.00 | 6,260 |
| 2500.732 | 6" HDPE Trenching (L) | 60 | LF | 17.39 | 1,043 |
| 2500.735 | 6" HDPE (M) | 60 | LF | 2.75 | 165 |
| 2500.740 | 8" HDPE Trenching (L) | 212 | LF | 17.39 | 3,686 |
| 2500.745 | 8" HDPE (M) | 212 | LF | 4.00 | 848 |
| 2500.760 | 12" HDPE Trenching (L) | 2,845 | LF | 17.39 | 49,465 |
| 2500.765 | 12" HDPE (M) | 2,845 | LF | 7.00 | 19,915 |
| 2500.770 | 15" HDPE Trenching (L) | 328 | LF | 17.39 | 5,703 |
| 2500.775 | 15" HDPE (M) | 328 | LF | 9.00 | 2,952 |
| 2500.780 | 18" HDPE Trenching (L) | 1,860 | LF | 17.39 | 32,339 |
| 2500.785 | 18" HDPE (M) | 1,860 | LF | 14.00 | 26,040 |
| 2500.790 | 24" HDPE Trenching (L) | 714 | LF | 17.39 | 12,414 |
| 2500.795 | 24" HDPE (M) | 714 | LF | 21.00 | 14,994 |
| 2510.305 | Sand Bedding (M) | 76 | CY | 10.00 | 760 |
| 2510.320 | Stone Bedding (M) | 3,006 | CY | 20.00 | 60,120 |
| 2510.340 | On-Site Backfill (M) | 8,111 | CY | | |
| 2510.510 | Storm Filter Catch Basin Units | 2 | EA | 2,608.00 | 5,216 |
| 2510.515 | Stormtech MC3500 Chamber Systems - Adanced Drainage Systems | 1 | LS | 175,000.00 | 175,000 |
| 2510.528 | Membrane at 40 Unit & 84 Unit Chambers | 8,067 | SF | 4.00 | 32,268 |
| 2510.530 | Install 4' Diameter PC Manhole | 53 | EA | 869.33 | 46,075 |
| 2510.532 | Install 4' Diameter PC Catch Basin | 36 | EA | 869.33 | 31,296 |

Job #: 15027
Project Size: 310380 SF
Detail - With Taxes and Insurance

Estimator: KN, JB, MT, AM
Group 1: Major ItemCode Groups
Group 2: Minor ItemCode Groups

| Item Code | Description | Quantity | UM | Total UnitCost | Total Cost |
|---|---|---|---|---|---|
| 2510.540 | 4' PC Manhole (M) | 53 | EA | 3,000.00 | 159,000 |
| 2510.542 | 4' PC Catch Basin (M) | 36 | EA | 3,000.00 | 108,000 |
| 2510.630 | MH/CB Connect To Existing | 8 | EA | 2,608.00 | 20,864 |
| 2510.706 | Truck Excess Pipe Excavation | 1,663 | CY | 3.00 | 4,988 |
| 2510.710 | Support Existing Pipe | 6 | EA | 1,304.00 | 7,824 |
| 2515.366 | Oil/Gas Separator (L) | 1 | EA | 818.40 | 818 |
| 2515.368 | Oil/Gas Separator (M) | 1 | EA | 5,000.00 | 5,000 |
| **** Total STORM DRAINAGE** | | | | | **949,886** |
| **SANITARY SYSTEMS** | | | | | |
| 2520.015 | 6" PVC Trenching (L) | 53 | LF | 13.04 | 691 |
| 2520.020 | 6" PVC (M) | 53 | LF | 3.50 | 186 |
| 2520.025 | 8" PVC Trenching (L) | 867 | LF | 17.39 | 15,074 |
| 2520.030 | 8" PVC (M) | 867 | LF | 6.00 | 5,202 |
| 2520.045 | 12" PVC Trenching (L) | 603 | LF | 17.39 | 10,484 |
| 2520.050 | 12" PVC (M) | 603 | LF | 12.00 | 7,236 |
| 2520.102 | 4" PVC Force Main | 697 | LF | 28.00 | 19,516 |
| 2520.620 | Stone Bedding (M) | 855 | CY | 20.00 | 17,094 |
| 2520.640 | On-Site Backfill (M) | 1,934 | CY | | |
| 2530.306 | Truck Excess Pipe Excavation | 438 | CY | 3.00 | 1,314 |
| 2530.308 | Connect To Existing Pipe/Structure | 1 | EA | 1,304.00 | 1,304 |
| 2530.530 | Install 4' Diameter PC Manhole | 7 | EA | 869.33 | 6,085 |
| 2530.540 | 4' PC Manhole (M) | 7 | EA | 3,200.00 | 22,400 |
| 2532.360 | Install Grease Trap (L) | 1 | EA | 818.40 | 818 |
| 2532.362 | Grease Trap-3000gal (M) | 1 | EA | 5,000.00 | 5,000 |
| **** Total SANITARY SYSTEMS** | | | | | **112,405** |
| **WATER SYSTEMS** | | | | | |
| 2540.105 | 6" D.I.P. Treching (L) | 31 | LF | 17.39 | 539 |
| 2540.105 | 8" D.I.P. Treching (L) | 2,196 | LF | 17.39 | 38,181 |
| 2540.110 | 6" Ductile Iron Pipe | 31 | LF | 16.00 | 496 |
| 2540.110 | 8" Ductile Iron Pipe | 2,196 | LF | 20.00 | 43,920 |
| 2540.205 | 1" CU Pipe Trenching (L) | 58 | LF | 12.36 | 717 |
| 2540.520 | Stone Bedding (M) | 489 | CY | 20.00 | 9,780 |
| 2540.540 | On-Site Backfill (M) | 1,518 | CY | | |
| 2540.606 | Truck Excess Pipe Excavation | 287 | CY | 3.00 | 861 |
| 2540.608 | Connect To Exist Pipe/Structural | 4 | EA | 1,304.00 | 5,216 |
| 2540.610 | Hydrant w/ 6" Gate Valve | 1 | EA | 5,345.77 | 5,346 |
| **** Total WATER SYSTEMS** | | | | | **105,056** |
| **PROCESS PIPING** | | | | | |
| 2560.305 | 1" CU Pipe Trenching (L) Gas | 58 | LF | 12.36 | 717 |
| 2560.810 | Sand Bedding (M) | 4 | CY | 10.00 | 40 |
| 2570.506 | Truck Excess Pipe Excavation | 8 | CY | 3.00 | 24 |
| **** Total PROCESS PIPING** | | | | | **781** |
| **MISC SITE UTILITIES** | | | | | |
| 2580.110 | Elec Trench-Direct Burial | 1,650 | LF | 8.04 | 13,266 |
| 2580.110 | Elec Trench-Direct Burial (Site Lighting) | 7,700 | LF | 8.04 | 61,908 |
| 2580.120 | Elec Trench-Duct Bank (Secondary/Primary Under Roads) | 140 | LF | 12.32 | 1,725 |
| 2580.130 | Elec Ductbank Forms | 560 | SF | 4.42 | 2,473 |
| 2580.140 | Elec Ductbank Concrete | 49 | CY | 121.08 | 5,933 |
| 2580.242 | Transformer Vault | 1 | EA | 2,929.58 | 2,930 |
| 2582.402 | Gas Line Trenching (L) (Conduit by utility) | 789 | LF | 16.48 | 13,003 |
| 2582.506 | Truck Excess Pipe Excavation | 186 | CY | 3.00 | 558 |
| 2582.825 | Stone Bedding (M) | 278 | CY | 20.00 | 5,560 |
| 2582.845 | On-Site Backfill (M) | 1,099 | CY | | |
| **** Total MISC SITE UTILITIES** | | | | | **107,355** |
| **ROADS/WALKS** | | | | | |

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| Item Code | Description | Quantity | UM | Total UnitCost | Total Cost |
|---|---|---|---|---|---|
| 2600.055 | Proofroll Road Subgrade | 23,035 | SY | 0.19 | 4,446 |
| 2600.060 | Fine Grade Road Subgrade | 23,035 | SY | 1.04 | 24,002 |
| 2600.080 | Stablization Fabric-Heavy | 26,490 | SY | 1.88 | 49,902 |
| 2600.100 | Install Road Sub-Base (L) | 10,750 | CY | 3.96 | 42,583 |
| 2600.104 | Sub-Base (M) | 10,750 | CY | 20.00 | 214,993 |
| 2600.130 | Install Road Base (L) | 5,375 | CY | 3.96 | 21,291 |
| 2600.136 | Base - Crushed Stone (M) | 5,375 | CY | 20.00 | 107,497 |
| 2600.200 | Bituminous Concrete Paving (4") | 3,631 | TON | 90.00 | 326,756 |
| 2600.200 | Bituminous Concrete Paving (2" ) - Phase 3, Westerly Portion | 836 | TON | 90.00 | 75,255 |
| 2600.200 | Change 4" Paving to 3-1/2" at fire loop only | -55 | TON | 90.00 | -4,950 |
| 2600.260 | Mill Existing Pavement-1" (Tennis Courts) | 1,662 | SY | 2.50 | 4,155 |
| 2600.264 | Overlay Existing Pavement ( 2") | 542 | TON | 90.00 | 48,767 |
| 2600.264 | Overlay Existing Pavement ( 2") To be applied over Phase 4 temp paving. | 698 | TON | 90.00 | 62,793 |
| 2600.264 | Overlay Existing Pavement ( 3") -to be applied over phase 4 temp paving | 208 | TON | 90.00 | 18,690 |
| 2600.264 | Overlay Existing Pavement ( 4") (At Tennis Courts) | 366 | TON | 90.00 | 32,934 |
| 2600.268 | Tack Coat @ Overlay | 18,131 | SY | 0.40 | 7,252 |
| 2600.270 | Remove Asphalt Paving at Alumni Road | 1 | LS | -48,767.00 | -48,767 |
| 2600.605 | Bollard Sign | 15 | EA | 419.38 | 6,291 |
| 2610.002 | Grading For Curbs | 8,454 | LF | 2.68 | 22,656 |
| 2610.062 | Granite Curbs 6" X 18" | 8,454 | LF | 25.00 | 211,350 |
| 2610.130 | Install Sidewalk Base (L) | 1,782 | CY | 12.57 | 22,392 |
| 2610.138 | Base - Crushed Stone (M) | 1,782 | CY | 20.00 | 35,640 |
| 2610.145 | Bituminous Sidewalk at Tennis Court | 9 | TON | 200.00 | 1,753 |
| 2610.174 | Sandblasted Concrete Paving at Entrances | 6,044 | SF | 6.00 | 36,264 |
| 2610.175 | 4" Concrete Sidewalk | 23,483 | SF | 4.00 | 93,932 |
| 2610.175 | 4" Concrete Sidewalk - Courtyard | 1,168 | SF | 4.00 | 4,672 |
| 2610.175 | 6" Concrete- Vehicular/Structural | 3,931 | SF | 5.00 | 19,655 |
| 2610.182 | 4" Concrete Sidewalk - Courtyard | 8,468 | SF | 4.00 | 33,872 |
| 2610.330 | Set Bollards (L) - (Material In Div 05) | 2 | EA | 240.76 | 482 |
| **** Total ROADS/WALKS** | | | | | **1,476,558** |
| **SITE IMPROVEMENTS** | | | | | |
| 2710.100 | Seeding | 199,115 | SF | 0.14 | 27,876 |
| 2710.120 | Sodding - Courtyard Only | 10,675 | SF | 0.75 | 8,006 |
| 2710.130 | Strom Water Management Plantings - Courtyard Only | 1,006 | SF | 9.00 | 9,054 |
| 2710.200 | Trees at Parking Lots and Bus Loop | 63 | EA | 1,100.00 | 69,300 |
| 2710.201 | Trees between Bellamy & Auto Shop along Alumni | 25 | EA | 1,100.00 | 27,500 |
| 2710.202 | Trees between Durham & Auto Shop along Alumni | 16 | EA | 1,100.00 | 17,600 |
| 2710.203 | Trees at Courtyard | 16 | EA | 1,100.00 | 17,600 |
| 2710.206 | Reduce Tree Caliper from 4-1/2" to 3" | 1 | LS | -9,450.00 | -9,450 |
| 2710.208 | Shrubs (36") | 284 | EA | 45.00 | 12,780 |
| 2710.210 | Shrubs (60") | 229 | EA | 85.00 | 19,465 |
| 2710.212 | Perennial Plantings | 4,243 | SF | 8.00 | 33,944 |
| 2710.212 | Perennial Plantings (Shrubs Spaced 4' OC) | 2,338 | SF | 8.00 | 18,704 |
| 2720.115 | Chain Link Fence - Vinyl Coated 4' H w/ Gates | 2,158 | LF | 28.00 | 60,424 |
| 2720.140 | 4' Chain Link Fence - Dog Run | 38 | LF | 17.00 | 646 |
| 2720.145 | 8' Black Vinyl Chain Link Fence - Livestock | 311 | LF | 25.00 | 7,775 |
| 2720.150 | 8' Black Vinyl Chain Link Fence - Horse Fence | 346 | LF | 25.00 | 8,650 |
| 2750.324 | Granite Stair Treads | 127 | LF | 75.00 | 9,525 |
| 2750.328 | Boulders | 37 | EA | 250.00 | 9,250 |
| 2750.330 | River Stone | 13 | CY | 125.00 | 1,625 |
| 2750.340 | Precast Seat Walls | 165 | LF | 360.00 | 59,400 |
| 2750.345 | B11 - Wood Slat Bench | 122 | LF | 80.00 | 9,760 |

Job #: 15027
Project Size: 310380 SF
Detail - With Taxes and Insurance

Estimator: KN, JB, MT, AM
Group 1: Major ItemCode Groups
Group 2: Minor ItemCode Groups

| Item Code | Description | Quantity | UM | Total UnitCost | Total Cost |
|---|---|---|---|---|---|
| 2750.350 | B15/16 - Courtyard Bench | 19 | LF | 60.00 | 1,140 |
| 2750.350 | B15/16 -Bench | 146 | LF | 60.00 | 8,760 |
| 2752.700 | Stainless Steel Bike Racks | 5 | EA | 754.76 | 3,774 |
| 2760.200 | Running EPDM Track Surface & Track Equipment to be included as Add Alternate | | | | |
| 2819.655 | Standard Redi-Rock Gravity Retaining Walls (Large Architectural Knob & Groove Pre Manufactured Block) (Small Area 50 - 250SF) | 4,184 | SF | 30.00 | 125,520 |
| **** Total SITE IMPROVEMENTS** | | | | | **558,628** |
| **ATHLETIC TURF** | | | | | |
| 2900.202 | ***Turf Field*** | | | | |
| 2900.204 | Install 4' Diameter PC Manhole | 6 | EA | 869.33 | 5,216 |
| 2900.206 | 4' PC Manhole (M) | 6 | EA | 3,200.00 | 19,200 |
| 2900.210 | 6" HDPE Trenching (L) | 515 | LF | 13.04 | 6,716 |
| 2900.212 | 6" HDPE (M) | 515 | LF | 2.75 | 1,416 |
| 2900.214 | 8" HDPE Trenching (L) | 744 | LF | 13.04 | 9,702 |
| 2900.216 | 8" HDPE (M) | 744 | LF | 4.00 | 2,976 |
| 2900.218 | 15" HDPE Trenching (L) | 594 | LF | 13.04 | 7,746 |
| 2900.220 | 15" HDPE (M) | 594 | LF | 9.00 | 5,346 |
| 2900.222 | 24" HDPE Trenching (L) | 663 | LF | 17.39 | 11,527 |
| 2900.224 | 24" HDPE (M) | 663 | LF | 21.00 | 13,923 |
| 2900.226 | Advanedge Drain Trenching (L) | 1,704 | LF | 13.04 | 22,220 |
| 2900.228 | Advanedge Drain (M) | 1,704 | LF | 12.00 | 20,448 |
| 2900.230 | Truck Excess Pipe Excavation | 826 | CY | 3.00 | 2,477 |
| 2900.231 | Sand Bedding (M) | 1,238 | CY | 10.00 | 12,384 |
| 2900.232 | On-Site Backfill (M) | 2,359 | CY | | |
| 2900.234 | Excavation to Stockpile | 1,600 | CY | 9.70 | 15,523 |
| 2900.235 | Crushed Stone Under Slab (L) | 2,750 | CY | 14.51 | 39,903 |
| 2900.236 | 6" #467 Stone (M) | 1,900 | CY | 25.00 | 47,500 |
| 2900.238 | 1-1/2" #89 Stone (M) | 500 | CY | 25.00 | 12,500 |
| 2900.240 | 1" #10 Stone (M) | 350 | CY | 35.00 | 12,250 |
| 2910.000 | Turf Field GCs | 12 | MW | 8,355.67 | 100,268 |
| 2920.000 | Synthetic Turf Field | 1 | LS | 350,622.00 | 350,622 |
| **** Total ATHLETIC TURF** | | | | | **719,862** |
| **ATHLETIC FIELDS** | | | | | |
| 2972.115 | Soccer Field Operlapping Baseball Field (Includes new drainage system) | 1 | EA | 200,000.00 | 200,000 |
| 2973.000 | 2nd Baseball Field & Added Sitework | 5 | MW | 8,355.04 | 44,900 |
| 2974.000 | Baseball Field (Includes new drainage system) | 2 | EA | 150,000.00 | 300,000 |
| **** Total ATHLETIC FIELDS** | | | | | **544,900** |
| **ATHLETIC COURTS** | | | | | |
| 2982.100 | Tennis Court | 4 | EA | 40,000.00 | 160,000 |
| **** Total ATHLETIC COURTS** | | | | | **160,000** |
| *** Total 02 - SITEWORK** | | | | | **10,007,306** |
| **03 - CONCRETE** | | | | | |
| **CONCRETE ACCESSORIES** | | | | | |
| 3250.450 | Vapor Barrier - Below Wood Floors | 18,987 | SF | 1.50 | 28,481 |
| 3250.451 | 15 Mil Stego Wrap Under Slab Vapor Barrier - Taped Seams | 197,439 | SF | 0.71 | 140,754 |
| **** Total CONCRETE ACCESSORIES** | | | | | **169,235** |
| **CONCRETE** | | | | | |
| 3391.000 | Winter Concrete | 6,000 | CY | 10.00 | 60,000 |
| 3391.011 | 1' x 2' Continuous Footing - 2,508 LF | 191 | CY | 360.00 | 68,886 |
| 3391.011 | 1' x 2' Continuous Footing - 406 LF | 31 | CY | 360.00 | 11,160 |
| 3391.011 | 1' x 2' Continuous Footing - 814 LF | 62 | CY | 360.00 | 22,356 |
| 3391.018 | 1' x 3' Continuous Footing - 91 LF | 13 | CY | 308.00 | 4,047 |

Job #: 15027
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Estimator: KN, JB, MT, AM
Group 1: Major ItemCode Groups
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| Item Code | Description | Quantity | UM | Total UnitCost | Total Cost |
|---|---|---|---|---|---|
| 3391.019 | 4'-6" x 1'-6" Continuous Footing (Cantilevered Ret Wall) - 145 LF | 137 | CY | 297.00 | 40,659 |
| 3391.020 | 7' x 2' Continuous Footing (Cantilevered Ret Wall) - 481 LF | 257 | CY | 273.00 | 70,161 |
| 3391.020 | 7' x 2' Continuous Footing (Cantilevered Ret Wall) - 88 LF | 47 | CY | 273.00 | 12,831 |
| 3391.022 | 8'-2" x 2' Continuous Footing (Cantilevered Ret Wall) - 20 LF | 12 | CY | 260.00 | 3,242 |
| 3391.024 | 10' x 2' Continuous Footing (Cantilevered Ret Wall) - 89 LF | 68 | CY | 258.00 | 17,518 |
| 3391.029 | 4' x 4' x 2'-6" Isolated Footing - 235 Total Footings | 359 | CY | 387.20 | 139,005 |
| 3391.029 | 4' x 4' x 2'-6" Isolated Footing - 52 Total Footings | 79 | CY | 387.20 | 30,724 |
| 3391.031 | 5' x 5' x 2'-6" Isolated Footing - 1 Total Footings | 5 | CY | 387.20 | 1,816 |
| 3391.033 | 6' x 4' x 2'-6" Isolated Footing - 10 EA | 23 | CY | 340.00 | 7,783 |
| 3391.036 | 8' x 8' x 2'-6" Isolated Footing - 7 EA | 6 | CY | 340.00 | 2,077 |
| 3391.045 | 10' x 10' x 2'-6" Isolated Footing - 6 EA | 57 | CY | 370.40 | 21,205 |
| 3391.215 | 14" X 4' Ht Frost Wall - 2,289 LF | 408 | CY | 592.80 | 241,566 |
| 3391.215 | 14" X 4' Ht Frost Wall - 812 LF | 145 | CY | 592.80 | 85,689 |
| 3391.225 | 14" x 4' Frost Wall - 406 LF | 72 | CY | 592.80 | 42,859 |
| 3391.225 | 16" x 13'-6" Ht Wall (Cantilevered ret wall) - 122 LF | 71 | CY | 592.80 | 42,326 |
| 3391.230 | 16" x 15' Ht Wall (Cantilevered ret wall) - 366 LF | 279 | CY | 585.00 | 162,952 |
| 3391.232 | 16" x 17' Ht Wall (Cantilevered ret wall) - 227 LF | 196 | CY | 575.00 | 112,579 |
| 3391.240 | 2' x 1'-6" x 4' ht Pilaster (19 EA) | 12 | CY | 860.00 | 9,976 |
| 3391.240 | 2' x 1'-6" x 4' ht Pilaster (93 EA) | 43 | CY | 860.00 | 36,610 |
| 3391.255 | 2' x 2' x 4' Height Column | 8 | CY | 758.40 | 6,325 |
| 3391.255 | 2' x 2' x 4' Height Column (2 EA) | 1 | CY | 758.40 | 925 |
| 3395.025 | 2' Base Slab, Rebar Reinforced, 1-mat - 539 Total SQ FT | 41 | CY | 660.00 | 27,139 |
| 3395.025 | 5" Slab on Grade - 3,557 SF | 57 | CY | 264.00 | 14,916 |
| 3395.025 | 5" Slab on Grade - 62,892 SF | 1,000 | CY | 264.00 | 263,913 |
| 3395.025 | 6" Slab on Grade, Rebar Reinforced, 1-mat - 27,722 Total SQ FT | 529 | CY | 264.00 | 139,595 |
| 3395.025 | 6" Slab on Grade, Rebar Reinforced, 1-mat - 79,902 Total SQ FT | 1,524 | CY | 264.00 | 402,336 |
| 3395.025 | 6" Slab on Grade, Rebar Reinforced, 1-mat - 8,410 SF | 161 | CY | 264.00 | 42,504 |
| 3395.055 | 6" Thickened Edge, Formed (for slab on grade) | 79 | CY | 215.00 | 16,985 |
| 3395.058 | 8" Thickened Edge, Formed (for slab on grade) | 76 | CY | 215.00 | 16,248 |
| 3395.210 | 2'-0" x 2'-6" Grade Beam - 1,248 LF | 238 | CY | 485.30 | 115,520 |
| 3395.210 | 2'-0" x 2'-6" Grade Beam - 116 LF | 22 | CY | 485.30 | 10,740 |
| 3395.505 | F1: 4" Slab on Metal Deck, Rebar Reinforced, 1-mat - 10,862 Total SQ FT | 136 | CY | 287.20 | 39,059 |
| 3395.505 | F1: 4" Slab on Metal Deck, Rebar Reinforced, 1-mat - 56,586 Total SQ FT | 712 | CY | 287.20 | 204,486 |
| 3395.510 | F2: 6-1/2" Slab on Metal Deck, Rebar Reinforced, 1-mat - 47,472 Total SQ FT | 981 | CY | 287.20 | 281,743 |
| 3395.510 | F2: 6-1/2" Slab on Metal Deck, Rebar Reinforced, 1-mat - 7,866 Total SQ FT | 163 | CY | 287.20 | 46,814 |
| 3395.525 | Auditorium Seating: Slab on Metal Deck, Rebar Reinforced, 1-mat - 3,577 Total SQ FT | 105 | CY | 340.00 | 35,659 |
| 3395.525 | F-3: 5" Slab on Metal Deck, Rebar Reinforced, 1-mat - 5,721 Total SQ FT | 91 | CY | 287.20 | 26,118 |
| 3395.525 | F-3: 5" Slab on Metal Deck, Rebar Reinforced, 1-mat - 963 Total SQ FT | 32 | CY | 287.20 | 9,190 |

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Group 2: Minor ItemCode Groups

| Item Code | Description | Quantity | UM | Total UnitCost | Total Cost |
|---|---|---|---|---|---|
| 3397.025 | 3' Wide x 1' High Concrete Step (Auditorium) - 316 CY | 1 | LS | 163,496.00 | 163,496 |
| 3397.028 | 1' Wide x 6" High Concrete Step (Auditorium) - 50 CY | 1 | LS | 23,400.00 | 23,400 |
| 3397.030 | 3' Wide x 1' High Concrete Step (Forum) - 48 CY | 1 | LS | 54,193.00 | 54,193 |
| 3397.032 | 1' Wide x 6" High Concrete Step (Forum) - 7 CY | 1 | LS | 3,250.00 | 3,250 |
| 3398.005 | Concrete Stairs - Courtyard | 185 | SF | 55.00 | 10,175 |
| 3398.009 | Concrete Stairs | 255 | SF | 55.00 | 14,025 |
| **** Total CONCRETE** | | | | | **3,216,784** |
| *** Total 03 - CONCRETE** | | | | | **3,386,019** |
| **03 - PRECAST CONCRETE** | | | | | |
| **PRECAST CONCRETE** | | | | | |
| 3400.125 | Precast concrete at base of curtain wall | 1 | LS | 12,000.00 | 12,000 |
| **** Total PRECAST CONCRETE** | | | | | **12,000** |
| *** Total 03 - PRECAST CONCRETE** | | | | | **12,000** |
| **04 - MASONRY** | | | | | |
| **MASONRY** | | | | | |
| 4000.005 | Brick Veneer System | 67,593 | SF | 26.00 | 1,757,418 |
| 4000.008 | Brick Veneer System (Reduction at front entry) | -577 | SF | 26.00 | -15,002 |
| 4000.010 | Brick Veneer System - w/ Projecting Bricks | 15,000 | SF | 32.00 | 480,000 |
| 4000.020 | Glazed CMU | 7,800 | SF | 20.00 | 156,000 |
| 4000.020 | Glazed CMU (At Gym) | 4,683 | SF | 20.00 | 93,660 |
| 4000.100 | 4" CMU Block Wall - Type 21A | 3,375 | SF | 11.00 | 37,125 |
| 4000.110 | 8" CMU Block Wall | 2,282 | SF | 12.00 | 27,384 |
| 4000.110 | 8" CMU Block Wall - Type 16A | 11,341 | SF | 12.00 | 136,092 |
| 4000.120 | 12" CMU Block Wall - Type 16D | 1,751 | SF | 21.00 | 36,771 |
| 4000.120 | 2 Hour Rated 12" CMU Block Wall - Type 16D | 544 | SF | 25.00 | 13,600 |
| 4030.410 | 8" "Soundblox" (Type R) - Gym | 1,227 | SF | 32.00 | 39,264 |
| **** Total MASONRY** | | | | | **2,762,312** |
| *** Total 04 - MASONRY** | | | | | **2,762,312** |
| **05 - METALS** | | | | | |
| **STRUCTURAL STEEL** | | | | | |
| 5010.050 | Structural Steel - (Reduction at front entry) | 1 | LS | -20,000.00 | -20,000 |
| 5010.050 | Structural Steel - Roof Structure | 1,030 | TON | 2,900.00 | 2,987,000 |
| 5010.052 | Structural Steel - Floor Structure | 1,295 | TON | 2,900.00 | 3,755,500 |
| 5010.060 | Structural Steel - Photovoltaics | 23 | TON | 2,900.00 | 65,540 |
| **** Total STRUCTURAL STEEL** | | | | | **6,788,040** |
| **METAL DECK** | | | | | |
| 5300.205 | R1.5: 1-1/2"x20ga Galvanized Metal Deck | 141,877 | SF | 1.70 | 241,191 |
| 5300.210 | R1.5: 1-1/2"x20ga Galvanized Acoustic Metal Deck | 25,856 | SF | 2.10 | 54,295 |
| 5300.210 | R1.5A: 1-1/2"x20ga Galvanized Acoustic Metal Deck | 15,124 | SF | 2.10 | 31,759 |
| 5300.302 | F1: 9/16"x26ga Galvanized Metal Deck | 75,936 | SF | 1.50 | 113,904 |
| 5300.305 | F2: 2"x20ga Galvanized Metal Deck | 62,459 | SF | 1.80 | 112,426 |
| 5300.405 | F3: 3"x20ga Galvanized Metal Deck | 12,542 | SF | 2.15 | 26,965 |
| 5300.405 | R3.0A: 3"x20ga Galvanized Acoustic Metal Deck | 15,201 | SF | 4.95 | 75,245 |
| 5300.415 | F3A: 3"x20ga Galvanized Acoustic Metal Deck | 514 | SF | 4.95 | 2,544 |
| **** Total METAL DECK** | | | | | **658,330** |
| **MISCELLANEOUS METALS** | | | | | |
| 5500.000 | OT/PT Swing Support | 1 | EA | 1,608.72 | 1,609 |
| 5510.000 | ****Metal Stairs**** | | **** | | |
| 5510.050 | Metal Pan Stair - 5'-6" | 23 | TRD | 448.27 | 10,310 |

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| Item Code | Description | Quantity | UM | Total UnitCost | Total Cost |
|---|---|---|---|---|---|
| 5510.050 | Metal Pan Stair - 7'-6" | 152 | TRD | 478.27 | 72,696 |
| 5510.052 | Metal Pan Stair Landing | 1,217 | SF | 71.60 | 87,132 |
| 5510.080 | Ships Ladder-Steel (Catwalk) | 20 | LF | 245.03 | 4,901 |
| 5510.580 | Steel Ladder w/o Cage - Roof Access | 22 | VLF | 65.21 | 1,435 |
| 5510.582 | Steel Ladder w/ Cage (Catwalk) | 62 | VLF | 108.89 | 6,751 |
| 5512.050 | Woven Wire Mesh Railings | 451 | LF | 125.00 | 56,375 |
| 5512.350 | Wall Railings | 342 | LF | 65.93 | 22,548 |
| 5512.400 | Stainless Steel Site Railings | 141 | LF | 80.00 | 11,280 |
| 5520.000 | *** Handrails & Railings *** | | **** | | |
| 5520.050 | Steel Handrail (Center of Tread) | 40 | LF | 52.21 | 2,088 |
| 5530.122 | Elevator Pit Misc Metals | 2 | EA | 1,813.09 | 3,626 |
| 5530.140 | Galvanized Metal Grating (Catwalk) | 1,045 | SF | 12.97 | 13,552 |
| 5590.010 | 6x4 Angle at Roof Edge | 63,129 | LBS | 2.63 | 166,269 |
| 5590.012 | 6x4 Angle Floating Lintel | 27,455 | LBS | 2.63 | 72,311 |
| 5590.012 | Miscellaneous Steel Framing-Galvanized - Equipment Screens | 3,770 | LBS | 1.54 | 5,800 |
| 5590.012 | Miscellaneous Steel Framing-Galvanized - Trench Drain 2x2 Angle | 496 | LBS | 3.13 | 1,554 |
| 5590.012 | Miscellaneous Steel Framing-GWB Half Partitions | 1 | LS | 7,997.40 | 7,997 |
| 5590.014 | 5x2 Angle at Curtain Wall (5-A7.20) | 506 | LBS | 2.63 | 1,333 |
| 5590.016 | Trench Drain | 83 | SF | 12.97 | 1,076 |
| 5590.024 | L2x2 Kicker at CMU Walls (M9-S.04) | 506 | LBS | 2.63 | 1,333 |
| 5590.026 | L5x3x1/4 Clips at CMU Walls (M12/13-S.04) | 638 | LBS | 4.57 | 2,913 |
| 5590.030 | Aluminum Column Enclosure | 1 | EA | 1,506.55 | 1,507 |
| 5590.110 | Bollards | 14 | EA | 269.52 | 3,773 |
| **** Total MISCELLANEOUS METALS** | | | | | **560,170** |
| *** Total 05 - METALS** | | | | | **8,006,539** |
| **06 - CARPENTRY** | | | | | |
| **ROUGH CARPENTRY** | | | | | |
| 6000.000 | In Wall Blocking | 300 | LF | 7.78 | 2,333 |
| 6000.000 | Roof edge blocking | 8,695 | LF | 7.78 | 67,607 |
| 6000.315 | Furred 3/4" Plywood Wall - Type 25A | 4,186 | SF | 1.87 | 7,840 |
| 6000.500 | Roof Trusses w/ sheathing - By Lester Buildings | | | | |
| 6010.000 | In Wall Blocking | 1 | LS | 50,000.00 | 50,000 |
| 6010.000 | In Wall Blocking | 1 | LS | 24,437.84 | 24,438 |
| 6010.125 | 2x6 Studs - Electrical Tech (By Others) | | | | |
| 6100.618 | Rough Cut Wood Stalls - By Lester Buildings | | | | |
| **** Total ROUGH CARPENTRY** | | | | | **152,217** |
| **TRIM/FINISH CARPENTRY** | | | | | |
| 6200.055 | Vertical Wood Slats over Apsorptive Panels | 5,212 | SF | 20.00 | 104,240 |
| 6200.057 | Solid Wood Reflective Acoustic Panels | 3,275 | SF | 20.00 | 65,500 |
| 6200.059 | Wood Slat Diffusive Panels | 3,425 | SF | 20.00 | 68,500 |
| 6200.061 | Unidentified Wall Panels | 1,524 | SF | 20.00 | 30,480 |
| 6200.064 | Reduce Auditorium Panel SF | -6,636 | SF | 20.00 | -132,720 |
| 6200.075 | Library Desk | 16 | LF | 400.00 | 6,400 |
| 6200.080 | Guidance Desk | 22 | LF | 400.00 | 8,800 |
| 6200.085 | Dean's Desk | 22 | LF | 400.00 | 8,800 |
| 6200.090 | Admin Desk | 18 | LF | 400.00 | 7,200 |
| 6200.104 | Borrowed Light Sill - Solid Surface | 1,990 | LF | 28.88 | 57,463 |
| 6200.104 | Window Sill - Solid Surface | 1,394 | LF | 28.88 | 40,253 |
| 6200.270 | 1x6 Trim-Maple (Borrowed Lights) | 650 | LF | 9.61 | 6,245 |
| 6200.275 | 1x8 Maple Cap at GWB Half Wall (Replacing Glass Handrail) | 220 | LF | 12.15 | 2,672 |
| 6200.300 | Sliding Barn Door - By Lester Buildings | | | | |
| 6200.300 | Stall Doors - By Lester Buildings | | | | |
| 6200.512 | Siding - By Lester Buildings | | | | |

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| Item Code | Description | Quantity | UM | Total UnitCost | Total Cost |
|---|---|---|---|---|---|
| 6200.550 | Wood Fascia/Soffit - By Lester Buildings | | | | |
| 6204.030 | Base Cabinets - Wood Veneer (Mail Room) | 31 | LF | 181.05 | 5,612 |
| 6205.105 | Mail Cubbies | 17 | LF | 224.68 | 3,820 |
| 6205.405 | Glass Display Case (7A-A8.4) | 6 | LF | 310.00 | 1,860 |
| 6205.410 | Art Display w/ Glass Doors (2B-A8.5) | 18 | LF | 310.00 | 5,580 |
| 6205.415 | Display Case (12-A8.6) | 23 | LF | 310.00 | 7,130 |
| 6205.420 | Wood Veneer Platform (2A-A8.4) | 20 | LF | 250.00 | 5,000 |
| 6206.445 | Solid Surface Locker Bench - 1' | 167 | LF | 115.00 | 19,205 |
| 6206.450 | Solid Surface Locker Bench - 2' | 65 | LF | 165.00 | 10,725 |
| 6210.066 | 4" Wood Base Paint Grade | 260 | LF | 6.05 | 1,574 |
| 6210.070 | 6" Wood Base Stain Grade | 1,057 | LF | 9.55 | 10,097 |
| **** Total TRIM/FINISH CARPENTRY** | | | | | **344,436** |
| | **FIBERGLASS FABRICATIONS** | | | | |
| 6810.922 | FRP Panels, Smooth Finish, Class C Non Rated (Mechanically Fastened) | 1,062 | SF | 5.25 | 5,571 |
| **** Total FIBERGLASS FABRICATIONS** | | | | | **5,571** |
| *** Total 06 - CARPENTRY** | | | | | **502,225** |
| | **07 - THERMAL/MOISTURE PROTECTION** | | | | |
| | **WATERPROOFING** | | | | |
| 7010.000 | Crystalline Waterproofing - Elevator Pits | 600 | SF | 2.50 | 1,500 |
| 7010.000 | Fluid Applied Waterproofing with Drainage Mat at Foundation Walls | 1,882 | SF | 4.50 | 8,469 |
| 7010.005 | Crystalline Waterproofing - Orchestra Pit | 4,256 | SF | 2.50 | 10,640 |
| 7110.100 | Dampproof Steel Columns Below Slab (6-A6.1) | 356 | EA | 26.80 | 9,540 |
| **** Total WATERPROOFING** | | | | | **30,149** |
| | **BUILDING INSULATION** | | | | |
| 7200.105 | Rigid Insulation - 2" (2' around SOG perimeter) | 17,434 | SF | 2.08 | 36,329 |
| 7200.105 | Rigid Insulation - 2" Frost Wall | 26,569 | SF | 2.08 | 55,364 |
| 7200.206 | Cellulose Insulation - 18" | 5,445 | SF | 1.74 | 9,472 |
| 7210.816 | 3-1/2" Mineral Wool Insulation | 109,756 | SF | 2.50 | 274,390 |
| 7210.816 | 6" Batt Insulation | 4,654 | SF | 1.50 | 6,981 |
| 7260.120 | Air Barrier - By Lester | | | | |
| 7260.120 | Spray applied A/V barrier | 109,756 | SF | 2.50 | 274,390 |
| **** Total BUILDING INSULATION** | | | | | **656,926** |
| | **PREFORMED ROOFING/SIDING** | | | | |
| 7420.012 | Centria Versa Wall - Insulated metal panel | 5,477 | SF | 30.00 | 164,310 |
| 7420.014 | Siding at Entry (Trespa & Back-up) | 1 | LS | 55,620.00 | 55,620 |
| 7420.040 | Ceiling Structure at Entry | 1 | LS | 15,000.00 | 15,000 |
| **** Total PREFORMED ROOFING/SIDING** | | | | | **234,930** |
| | **ROOFING** | | | | |
| 7530.017 | Roof Type R1A | 132,900 | SF | 9.00 | 1,196,100 |
| 7530.018 | Roof Type R1B | 30,440 | SF | 9.00 | 273,960 |
| 7530.019 | Roof Type R1C | 8,990 | SF | 9.00 | 80,910 |
| 7530.030 | Membrane Roofing at Entry | 4,400 | SF | 9.00 | 39,600 |
| 7700.001 | Roof Walkway Pads | 3,000 | SF | 18.00 | 54,000 |
| 7700.002 | Roof Scuppers | | EA | 1,000.00 | |
| 7700.003 | *** Roof-top Units (Curbs) *** | 25 | EA | | |
| 7700.004 | Roof Expansion Joint/Bulb Assemby | 267 | LF | 40.00 | 10,680 |
| 7700.005 | Exterior Wall Expansion Joint Assembly | 210 | LF | 40.00 | 8,400 |
| **** Total ROOFING** | | | | | **1,663,650** |
| | **ROOF ACCESSORIES** | | | | |
| 7800.120 | Parapet Cap/ Coping | 4,545 | LF | 9.00 | 40,905 |
| 7800.140 | Animal Science Barn Cupola | 1 | EA | 6,000.00 | 6,000 |
| 7800.250 | Metal Roof Edge with 4" Fascia | 5,824 | LF | 9.00 | 52,416 |
| 7800.251 | Metal Roof Cap at Brick Piers (1'-6"x10'-0") | 6 | EA | 180.00 | 1,080 |
| 7810.000 | Barn Skylights - 4'x4' | 10 | EA | 894.38 | 8,944 |

Job #: 15027
Project Size: 310380 SF
Detail - With Taxes and Insurance

Estimator: KN, JB, MT, AM
Group 1: Major ItemCode Groups
Group 2: Minor ItemCode Groups

| Item Code | Description | Quantity | UM | Total UnitCost | Total Cost |
|---|---|---|---|---|---|
| 7810.100 | Roof Hatch (3x3) | 3 | EA | 1,238.08 | 3,714 |
| ** Total ROOF ACCESSORIES | | | | | **113,059** |
| **FIREPROOFING** | | | | | |
| 7850.001 | Spray Fireproofing - Roof Deck (At Type IB Const Only per Struct Narrative) | 88,433 | SF | 1.50 | 132,650 |
| 7850.001 | Spray Fireproofing - Structural Steel Beams & Columns Only (At Type IB Const Only per Struct Narrative) | 136,928 | SF | 1.00 | 136,928 |
| ** Total FIREPROOFING | | | | | **269,578** |
| * Total 07 - THERMAL/MOISTURE PROTECTION | | | | | **2,968,291** |
| **08 - DOORS AND WINDOWS** | | | | | |
| **HOLLOW METAL DOORS & FRAMES** | | | | | |
| 8010.010 | 3070 Exterior Door | 12 | EA | 2,500.00 | 30,000 |
| 8010.010 | 3070 Exterior Door | 6 | EA | 2,000.00 | 12,000 |
| 8010.010 | 3070 Exterior Door | 15 | EA | 1,404.76 | 21,071 |
| 8010.010 | 6070 Exterior Door | 10 | EA | 2,500.00 | 25,000 |
| 8010.010 | 6070 Exterior Door | 4 | EA | 2,500.00 | 10,000 |
| 8010.020 | 6070 Exterior Door | 2 | EA | 5,000.00 | 10,000 |
| 8012.008 | 3070 Interior Wood Door w/glass, STC-30, Hollow Metal Frame | 30 | EA | 2,700.00 | 81,000 |
| 8012.008 | 3070 Interior Wood Door w/glass, STC-40, Hollow Metal Frame | 10 | EA | 3,000.00 | 30,000 |
| 8012.008 | 3070 Interior Wood Door, 45min rated, Hollow Metal Frame | 2 | EA | 1,500.00 | 3,000 |
| 8012.008 | 3070 Interior Wood Door, 90min rated, Hollow Metal Frame | 3 | EA | 1,700.00 | 5,100 |
| 8012.008 | 3070 Interior Wood Door, Hollow Metal Frame | 204 | EA | 1,204.76 | 245,771 |
| 8012.008 | 6070 Interior Wood Door w/large glass, Hollow Metal Frame | 13 | EA | 3,000.00 | 39,000 |
| 8012.010 | 3070 Interior Wood Door, Hollow Metal Frame w/ Glass | 102 | EA | 1,404.76 | 143,286 |
| 8012.010 | 6070 Interior Wood Door w/glass, STC-40, Hollow Metal Frame | 3 | EA | 3,500.00 | 10,500 |
| 8012.010 | 6070 Interior Wood Door, 120min rated, Hollow Metal Frame | 5 | EA | 3,000.00 | 15,000 |
| 8012.010 | 6070 Interior Wood Door, 45min rated, Hollow Metal Frame | 11 | EA | 2,000.00 | 22,000 |
| 8012.010 | 6070 Interior Wood Door, 90min rated, Hollow Metal Frame | 2 | EA | 2,400.00 | 4,800 |
| 8012.012 | 3070 Interior Hollow Metal Door & Frame | 4 | EA | 1,105.00 | 4,420 |
| 8012.016 | 6070 Interior Hollow Metal Door & Frame | 3 | EA | 1,900.00 | 5,700 |
| 8012.018 | 6070 Interior Wood Door, Hollow Metal Frame | 31 | EA | 1,765.16 | 54,720 |
| 8012.019 | Transoms | 6 | EA | 600.00 | 3,600 |
| 8014.000 | Corridor Lock Down Hardware | 1 | LS | 50,000.00 | 50,000 |
| 8014.020 | Interior Borrowed Lite - 2' x 4' | 2 | EA | 449.52 | 899 |
| 8014.020 | Interior Borrowed Lite - 3' x 8'-8" | 16 | EA | 550.00 | 8,800 |
| 8014.020 | Interior Borrowed Lite - 3' x 8'-8" | 6 | EA | 550.00 | 3,300 |
| 8014.021 | Interior Borrowed Lite - 3'-6" x 4' | 37 | EA | 500.00 | 18,500 |
| 8014.021 | Interior Borrowed Lite - 3'-6" x 4' | 10 | EA | 500.00 | 5,000 |
| 8014.025 | Interior Borrowed Lite - 2' x 4' | 38 | EA | 449.52 | 17,082 |
| 8014.025 | Interior Borrowed Lite - 2' x 6'-10" | 16 | EA | 659.52 | 10,552 |
| 8014.025 | Interior Borrowed Lite - 3' x 5' | 4 | EA | 659.52 | 2,638 |
| 8014.030 | Interior Borrowed Lite - 3'-4" x 3'-10" | 3 | EA | 550.00 | 1,650 |
| 8014.030 | Interior Borrowed Lite - 3'-4" x 4' | 56 | EA | 449.52 | 25,173 |
| 8014.030 | Interior Borrowed Lite - 3'-4" x 4' | 14 | EA | 450.00 | 6,300 |
| 8014.030 | Interior Borrowed Lite - 3'-4" x 6'-10" | 11 | EA | 850.00 | 9,350 |
| 8014.035 | Interior Borrowed Lite - 10' x 3'-8" | 12 | EA | 1,200.00 | 14,400 |

Job #: 15027
Project Size: 310380 SF
Detail - With Taxes and Insurance

Estimator: KN, JB, MT, AM
Group 1: Major ItemCode Groups
Group 2: Minor ItemCode Groups

| Item Code | Description | Quantity | UM | Total UnitCost | Total Cost |
|---|---|---|---|---|---|
| 8014.035 | Interior Borrowed Lite - 3'-4" x 3'-8" | 18 | EA | 550.00 | 9,900 |
| 8014.040 | Interior Borrowed Lite - 12' x 4'-10" | 1 | EA | 2,000.00 | 2,000 |
| 8014.040 | Interior Borrowed Lite - 8' x 3'-10" | 11 | EA | 1,000.00 | 11,000 |
| 8014.040 | Interior Borrowed Lite - 8' x 5' | 3 | EA | 1,409.52 | 4,229 |
| 8014.045 | Interior Borrowed Lite - 6' x 4'-10" | 1 | EA | 1,200.00 | 1,200 |
| 8014.050 | Interior Borrowed Lite - 13'-4" x 8'-10" | 2 | EA | 2,159.52 | 4,319 |
| 8014.050 | Interior Borrowed Lite - 4' x 6'-8" | 2 | EA | 800.00 | 1,600 |
| 8014.055 | Interior Borrowed Lite - 15' x 4' | 1 | EA | 2,459.52 | 2,460 |
| 8015.000 | Interior Borrowed Lites to Replace Interior Curtain Wall | 1 | LS | 21,000.00 | 21,000 |
| 8016.010 | 3070 Interior Barn Door - By Lester Buildings | | | | |
| 8016.020 | 6070 Interior Barn Door - By Lester Buildings | | | | |
| **** Total HOLLOW METAL DOORS & FRAMES** | | | | | **1,007,319** |
| | **SPECIAL DOORS** | | | | |
| 8300.100 | 12' x 12' Overhead Door | 2 | EA | 8,800.00 | 17,600 |
| 8300.100 | 12' x 12' Specialty Overhead Door with Glass | 2 | EA | 12,000.00 | 24,000 |
| 8300.100 | 27' x 18' Overhead Door | 1 | EA | 16,000.00 | 16,000 |
| 8300.105 | 11' x 8' Overhead Door | 3 | EA | 8,500.00 | 25,500 |
| 8300.108 | 10'-6" x 8' Overhead Door (Interior) | 2 | EA | 5,000.00 | 10,000 |
| 8300.108 | 4' x 8' Overhead Door (Interior) | 1 | EA | 2,500.00 | 2,500 |
| 8300.108 | 8' x 8'-3" Overhead Door (Interior) | 2 | EA | 3,500.00 | 7,000 |
| 8300.112 | 12' x 12' Overhead Door (Interior) | 1 | EA | 8,800.00 | 8,800 |
| 8300.200 | Bi-Fold Doors to Sound Booth | 1 | SF | 2,000.00 | 2,000 |
| **** Total SPECIAL DOORS** | | | | | **113,400** |
| | **METAL WINDOWS** | | | | |
| 8500.010 | Aluminum Barn Window 2' x 4' | 11 | EA | 470.78 | 5,179 |
| 8500.010 | Operable Aluminum Windows | 7,171 | SF | 60.00 | 430,260 |
| 8500.012 | Aluminum Barn Window 5' x 5'-4" | 13 | EA | 1,395.78 | 18,145 |
| 8500.014 | Aluminum Barn Window 5' x 5'-4" (Interior) | 1 | EA | 1,395.78 | 1,396 |
| 8500.040 | Coollite ALT-SF-2 Skylight | 38 | EA | 344.38 | 13,086 |
| **** Total METAL WINDOWS** | | | | | **468,066** |
| | **GLASS AND GLAZING** | | | | |
| 8800.800 | Curtainwall | 14,500 | SF | 80.00 | 1,160,000 |
| 8800.800 | Curtainwall - Canopy at Entrance | 1 | LS | 5,000.00 | 5,000 |
| 8800.844 | Glass Handrail - Town Square | 28 | LF | 265.00 | 7,420 |
| 8800.844 | Nanawall Sliding Door 8' 6" x 16' (Interior) | 16 | LF | 648.02 | 10,368 |
| 8800.846 | Nanawall Sliding Door 9' 11" x 14' 7" (Exterior) | 30 | LF | 1,230.15 | 36,905 |
| 8802.000 | Door Leaves in Curtain Wall | 29 | EA | 2,000.00 | 58,000 |
| 8810.004 | 3070 Exterior Storefront Door | 3 | EA | 1,600.00 | 4,800 |
| **** Total GLASS AND GLAZING** | | | | | **1,282,493** |
| *** Total 08 - DOORS AND WINDOWS** | | | | | **2,871,278** |
| **09 - FINISHES** | | | | | |
| | **DRYWALL** | | | | |
| 9280.114 | 5/8" Abuse Resistant Gypsum Board (2 layers at 17') - Gym | 18,846 | SF | 3.09 | 58,234 |
| 9282.001 | ===Wall Type Area: INT PARTITION - TO DECK=== | | | | |
| 9285.001 | Interior Partition: 6" Framing, 5/8" Type "X" GWB (2 Sides), Sound Batt, Taped (Level 4) - Type 01A | 95,908 | SF | 6.77 | 649,556 |
| 9285.002 | 1 Hour Rated Interior Partition: 6" Framing, 5/8" Type "X" GWB (2 Sides), Sound Batt, Firestopping, Taped (Level 4) - Type 01A | 4,843 | SF | 8.31 | 40,260 |
| 9285.003 | Interior Partition: 6" Framing, 5/8" Type "X" GWB (3 Layers; 2 on Corridor Side, 1 Class Room Side), Sound Batt, Taped (Level 4) - Type 02A | 84,698 | SF | 7.62 | 645,653 |

Job #: 15027
Project Size: 310380 SF
Detail - With Taxes and Insurance

Estimator: KN, JB, MT, AM
Group 1: Major ItemCode Groups
Group 2: Minor ItemCode Groups

| Item Code | Description | Quantity | UM | Total UnitCost | Total Cost |
|---|---|---|---|---|---|
| 9285.004 | 1 Hour Rated Interior Partition: 6" Framing, 5/8" Type "X" GWB (3 Layers; 2 on Corridor Side, 1 Class Room Side), Sound Batt, Firestopping, Taped (Level 4) - Type 02A | 6,635 | SF | 8.31 | 55,157 |
| 9285.005 | Interior Partition: 8" Framing, 5/8" Type "X" GWB (3 Layers; 2 on Corridor Side, 1 Class Room Side), Sound Batt, Taped (Level 4) - Type 02C | 41,691 | SF | 8.27 | 344,901 |
| 9285.006 | 1 Hour Rated Interior Partition: 8" Framing, 5/8" Type "X" GWB (3 Layers; 2 on Corridor Side, 1 Class Room Side), Sound Batt, Firestopping, Taped (Level 4) - Type 02C | 3,896 | SF | 10.00 | 38,960 |
| 9285.007 | Interior Partition: 6" Framing, 5/8" Type "X" GWB (2 Layers, 2 Sides), Sound Batt, Taped (Level 4) - Type 03A | 7,429 | SF | 8.00 | 59,435 |
| 9285.007 | Interior Partition: 8" Framing, 5/8" Type "X" GWB (2 Layers, 2 Sides), Sound Batt, Taped (Level 4) - Type 03C | 3,645 | SF | 9.00 | 32,807 |
| 9285.008 | 2 Hour Rated Interior Partition: 8" Framing, 5/8" Type "X" GWB (2 Layers, 2 Sides), Sound Batt, Firestopping, Taped (Level 4) - Type 03C | 898 | SF | 7.89 | 7,088 |
| 9285.009 | 2 Hour Rated Interior Partition: 6" Framing, 5/8" Type "X" GWB (2 Layers, 2 Sides), Sound Batt, Firestopping, Taped (Level 4) - Type 03A | 4,691 | SF | 9.99 | 46,851 |
| 9285.010 | Furred Partition: 6" Framing, 5/8" Type "X" GWB (1 Side), Sound Batt,Taped (Level 4) - Type 06A | 37,684 | SF | 5.59 | 210,797 |
| 9285.011 | Interior Partition: 8" Track, 6" Staggered Framing, 5/8" Type "X" GWB (2 Layers, 2 Sides), Sound Batt, Taped (Level 4) - Type 11A | 3,340 | SF | 24.58 | 82,097 |
| 9285.011 | LED Recessed Interior Partition: 6" Framing, 5/8" Type "X" GWB (1 Sides), Taped (Level 5) - Town Square | 1,200 | SF | 7.89 | 9,472 |
| 9285.013 | Furred Partition: 3 5/8" Framing, 5/8" Type "X" GWB (1 Side), Sound Batt, Taped (Level 4) - Type 06B | 3,254 | SF | 5.14 | 16,738 |
| 9285.013 | Furred Partition: 3 5/8" Framing, 5/8" Type "X" GWB (1 Side), Taped (Level 4) - Type 19A | 3,223 | SF | 4.21 | 13,581 |
| 9285.015 | Exterior Partition: 6" Framing, 5/8" Type "X" GWB (1 Side), 1/2" Dens Glass, Taped (Level 4) - Type WA1 | 104,461 | SF | 8.50 | 887,919 |
| 9285.015 | Furred Partition: 6" Framing, 5/8" Type "X" GWB (2 layers, 1 Side), Sound Batt, Taped (Level 4) - Type 07A | 24,951 | SF | 7.19 | 179,493 |
| 9285.015 | Furred Partition: 8" Framing, 5/8" Type "X" GWB (1 Side), Taped (Level 4) - Type 01C | 70 | SF | 7.19 | 504 |
| 9285.020 | Interior Partition: Double Wall, 6" Framing, 5/8" Type "X" GWB (2 Layers, 2 Sides), Sound Batt, Taped (Level 4) - Type 12B | 23,504 | SF | 22.43 | 527,195 |
| 9285.020 | Interior Partition: Double Wall, 6" Framing, 5/8" Type "X" GWB (2 Layers, 2 Sides), Sound Batt, Taped (Level 4) - Type 12B | 1,687 | SF | 22.43 | 37,840 |
| 9285.022 | Interior Partition: Double Wall, 6" Framing, 5/8" Type "X" GWB (1 Layer, 2 Sides), Sound Batt, Taped (Level 4) - Type 24B | 1,687 | SF | 19.09 | 32,205 |
| 9285.023 | Fire Stopping | 1 | LS | 15,000.00 | 15,000 |
| 9285.023 | Fire Stopping | 1 | LS | 60,000.00 | 60,000 |
| 9285.025 | Premium for Abuse Resistant Drywall at removed tile | 29,111 | SF | 1.32 | 38,427 |

| Item Code | Description | Quantity | UM | Total UnitCost | Total Cost |
|---|---|---|---|---|---|
| 9285.031 | Shaft Wall Partition (2 Hour Rated): 4" CH Framing, 1" Core Board, 5/8" Type "X" GWB (2 Layer), Sound Batt, Firestopping, Taped (Level 4) - Type 23B | 2,518 | SF | 9.86 | 24,825 |
| 9285.033 | Shaft Wall Partition (2 Hour Rated): 6" CH Framing, 1" Core Board, 5/8" Type "X" GWB (2 Layer), Sound Batt, Firestopping, Taped (Level 4) - Type 10C | 1,213 | SF | 10.46 | 12,687 |
| 9285.037 | Gypsum Ceiling: Suspended Drywall Grid 5/8" Type "X" GWB (1 Layer), Taped (Level 4) - C2A | 19,624 | SF | 5.31 | 104,205 |
| 9285.037 | Gypsum Ceiling: Suspended Drywall Grid 5/8" Type "X" GWB (1 Layer), Taped (Level 4) - C2A | -4,750 | SF | 5.31 | -25,222 |
| 9285.043 | Gypsum: "U" Soffit - Metal Framing, 5/8" GWB, Corner Bead (2), Taped (Level 4) - C2A | 2,358 | SF | 49.73 | 117,252 |
| 9286.000 | Misc Framing at Front Entry | 1 | LS | 15,000.00 | 15,000 |
| **** Total DRYWALL** | | | | | **4,338,915** |
| **CERAMIC TILE** | | | | | |
| 9300.100 | Ceramic Tile Floor - Thin Set | 12,452 | SF | 10.00 | 124,520 |
| 9300.105 | Ceramic Tile Base - Thin Set | 11,594 | LF | 10.00 | 115,940 |
| 9300.200 | Ceramic Tile Wall - Thin Set | 35,912 | SF | 10.00 | 359,120 |
| 9320.005 | Porcelain Tile Floor | 8,497 | SF | 12.00 | 101,964 |
| 9320.010 | Porcelain Tile Base | 1,357 | LF | 12.00 | 16,284 |
| **** Total CERAMIC TILE** | | | | | **717,828** |
| **MARBLE** | | | | | |
| 9360.070 | Marble Threshold | 24 | EA | 50.00 | 1,200 |
| **** Total MARBLE** | | | | | **1,200** |
| **ACOUSTICAL TREATMENT** | | | | | |
| 9500.210 | 24x24x3/4 Lay-In ACT | 4,297 | SF | 3.00 | 12,891 |
| 9500.212 | 24x24x3/4 Lay-In ACT | 6,687 | SF | 3.50 | 23,405 |
| 9500.215 | 24x24x3/4 Lay-In ACT Washable | 3,202 | SF | 5.00 | 16,010 |
| 9500.310 | 24x48x3/4 Lay-In ACT | 168,307 | SF | 2.70 | 454,429 |
| 9500.315 | 24x48x3/4 Lay-In ACT - (Low NRC) | 4,633 | SF | 3.50 | 16,216 |
| 9500.320 | 24x96x3/4 Lay-In ACT | 3,851 | SF | 2.70 | 10,398 |
| 9500.324 | Delete ceilings in art, storage rooms and janitor closets. | 1 | LS | -5,051.00 | -5,051 |
| 9500.390 | ACT (Main Entry) | 1,373 | SF | 6.00 | 8,238 |
| 9500.390 | Reflective GWB Ceiling Panels (Auditorium) | 3,340 | SF | 25.00 | 83,500 |
| 9500.518 | 3" Sound Attenuation Blanket (Acoustic Separation Ceilng) | 16,952 | SF | 1.50 | 25,428 |
| 9500.520 | Pyramidal Ceiling Tiles (Band & Music Room) | 1,925 | SF | 25.00 | 48,125 |
| 9500.612 | Ecophon Acoustical Wall Panels (Town Square/ Corridors) | 2,825 | SF | 9.00 | 25,425 |
| 9500.612 | Tectum Wall Panels - 2" | 7,458 | SF | 7.00 | 52,206 |
| 9540.120 | Acoustic Diffusion Panels | 160 | SF | 15.00 | 2,400 |
| **** Total ACOUSTICAL TREATMENT** | | | | | **773,619** |
| **WOOD FLOORING** | | | | | |
| 9550.100 | Painted Hardboard System | 2,985 | SF | 16.00 | 47,760 |
| 9550.102 | Maple Strip Flooring Pre-Finished | 12,769 | SF | 12.00 | 153,228 |
| 9550.102 | Rubber Athletic Floor (Practice Gym) | 6,219 | SF | 9.00 | 55,971 |
| **** Total WOOD FLOORING** | | | | | **256,959** |
| **RESILIENT FLOORING** | | | | | |
| 9650.008 | Linoleum Flooring - 2 mm | 172,218 | SF | 4.00 | 688,872 |
| 9650.025 | 4" Rubber Base | 30,137 | LF | 2.75 | 82,877 |
| 9650.027 | Ventilating Cove Base | 846 | LF | 6.00 | 5,076 |

Job #: 15027
Project Size: 310380 SF
Detail - With Taxes and Insurance

Estimator: KN, JB, MT, AM
Group 1: Major ItemCode Groups
Group 2: Minor ItemCode Groups

| Item Code | Description | Quantity | UM | Total UnitCost | Total Cost |
|---|---|---|---|---|---|
| 9650.032 | Rubber Treads & Risers (Town Square) | 1,700 | SF | 11.00 | 18,700 |
| 9675.055 | Floor Expansion Joint (Prep, Expansion material, and Cover Plate) | 113 | LF | 185.00 | 20,905 |
| ** Total RESILIENT FLOORING | | | | | **816,430** |
| **CARPET** | | | | | |
| 9680.000 | Carpet | 317 | SY | 35.00 | 11,095 |
| ** Total CARPET | | | | | **11,095** |
| **SPECIAL FLOORING** | | | | | |
| 9700.000 | Heavy Duty Agricultural Use Rubber (Barn Stalls) | 1,965 | SF | 20.00 | 39,300 |
| 9760.010 | 1/2" Interlocking Rubber Floor Tile | 2,737 | SF | 8.20 | 22,436 |
| 9800.005 | Exposed Concrete/Hardener/Sealer | 43,874 | SF | 3.00 | 131,622 |
| 9800.008 | Exposed Concrete/Hardener/Sealer - Stair Treads | 8,218 | SF | 3.25 | 26,709 |
| 9800.010 | Architectural Finished Concrete (Polished) | 23,138 | SF | 6.00 | 138,828 |
| 9850.050 | Moisture Mitigation (Grace or Koster VAP I 2000) | 2,855 | SF | 4.00 | 11,420 |
| ** Total SPECIAL FLOORING | | | | | **370,315** |
| **PAINTING/WALL COVERING** | | | | | |
| 9900.100 | Misc Painting - Door Frames, Misc Metals | 1 | LS | 4,000.00 | 4,000 |
| 9900.100 | Paint Gypsum Walls (1 Coat Latex Primer, 2 Coats Latex Paint) | 527,015 | SF | 0.82 | 432,152 |
| 9900.100 | Paint Gypsum Walls (Replacing 29,111 SF of removed wall tile) | 29,111 | SF | 0.82 | 23,871 |
| 9900.205 | Misc Painting - Door Frames, Misc Metals | 1 | LS | 8,000.00 | 8,000 |
| 9900.205 | Misc Painting - Door Frames, Misc Metals | 1 | LS | 69,000.00 | 69,000 |
| 9900.310 | Paint Bollards (1 Coat Acrylic Primer, 2 Coats Acrylic Paint) | 14 | EA | 46.00 | 644 |
| 9900.506 | Paint Gym Floor Logo | 1 | LS | 3,000.00 | 3,000 |
| 9900.600 | Paint Steel Structure - Type Exposed Steel/Deck | 38,380 | SF | 2.00 | 76,760 |
| 9900.610 | Paint Stair Risers | 3,287 | SF | 3.00 | 9,861 |
| 9912.000 | 2 HR Intumescent Paint at Columns | 5 | EA | 1,200.00 | 6,000 |
| 9912.020 | 2 HR Intumescent Paint at at gym steel | 1,500 | SF | 15.00 | 22,500 |
| 9950.000 | Marker Board Paint | 300 | SF | 2.50 | 750 |
| ** Total PAINTING/WALL COVERING | | | | | **656,538** |
| * Total 09 - FINISHES | | | | | **7,942,898** |
| **10 - SPECIALTIES** | | | | | |
| **MISC SPECIALTIES** | | | | | |
| 10000.010 | Flag Pole | 1 | EA | 2,277.73 | 2,278 |
| 10000.020 | **Smart Boards - N/A per HMFH | | EA | 2,677.73 | |
| ** Total MISC SPECIALTIES | | | | | **2,278** |
| **CHALKBOARDS & TACKBOARDS** | | | | | |
| 10100.004 | 16' Marker Board w/ Aluminum Trim (QTY=8) | 512 | SF | 16.72 | 8,562 |
| 10100.004 | 24' Marker Board w/ Aluminum Trim (QTY=46) | 4,416 | SF | 16.72 | 73,848 |
| 10100.004 | 4' Marker Board W/ Alum Trim (QTY=60) | 960 | SF | 16.72 | 16,054 |
| 10100.004 | 6' Marker Board W/ Alum Trim (QTY=63) | 1,512 | SF | 16.72 | 25,285 |
| 10100.004 | 8' Marker Board W/ Alum Trim (QTY=164) | 5,248 | SF | 16.72 | 87,760 |
| 10100.008 | 4' Tack Board w/ Alum Trim (QTY=28) | 448 | SF | 10.39 | 4,657 |
| 10100.020 | Remove Tack Boards at Corridor | -1,176 | SF | 16.73 | -19,674 |
| ** Total CHALKBOARDS & TACKBOARDS | | | | | **196,492** |
| **COMPARTMENTS & CUBICLES** | | | | | |
| 10180.100 | Floor Mounted Toilet Compartment | 50 | EA | 694.04 | 34,702 |
| 10180.103 | Urinal Screen | 8 | EA | 309.52 | 2,476 |
| 10191.100 | Privacy Curtain: Track w/ Supports (No Curtain) | 30 | LF | 11.64 | 349 |

Job #: 15027
Project Size: 310380 SF
Detail - With Taxes and Insurance

Estimator: KN, JB, MT, AM
Group 1: Major ItemCode Groups
Group 2: Minor ItemCode Groups

| Item Code | Description | Quantity | UM | Total UnitCost | Total Cost |
|---|---|---|---|---|---|
| 10191.100 | Privacy Curtain: Track W/Supports (No Curtain) - Nurse | 64 | LF | 22.50 | 1,440 |
| **** Total COMPARTMENTS & CUBICLES** | | | | | **38,967** |
| **LOUVERS & VENTS** | | | | | |
| 10200.001 | 4' x 4' Louver | 1 | EA | 694.38 | 694 |
| 10200.010 | Equipment Screen - Visual 8'-0" Tall Panel | 2,800 | SF | 40.67 | 113,873 |
| 10221.300 | Interior Chain Link Partition - Galvanized 14' High | 66 | LF | 40.00 | 2,640 |
| **** Total LOUVERS & VENTS** | | | | | **117,207** |
| **IDENTIFYING DEVICES** | | | | | |
| 10410.150 | Signage | 1 | LS | 10,000.00 | 10,000 |
| 10410.150 | Signage | 1 | LS | 78,000.00 | 78,000 |
| **** Total IDENTIFYING DEVICES** | | | | | **88,000** |
| **LOCKERS** | | | | | |
| 10500.000 | Lockers - Single Tier (72"x15"x12") - Athletic | 372 | EA | 294.76 | 109,651 |
| 10500.004 | Lockers - Double Tier (6' X 18" X 18") - Student (Salvage & Paint Existing) | 769 | EA | 100.00 | 76,900 |
| 10500.006 | Lockers - Six Tier (12"x12"x12") - Lab and Auto | 144 | EA | 382.10 | 55,022 |
| 10500.010 | Lockers - Single Locker; Welded Steel Storage (24"x15"x15") - Teacher's | 80 | EA | 182.76 | 14,621 |
| **** Total LOCKERS** | | | | | **256,193** |
| **FIRE EXT,CABINETS&ACCESS** | | | | | |
| 10520.000 | **Fire Extinguishers | 102 | EA | 125.46 | 12,797 |
| 10520.050 | **Fire Ext Cabinets | 102 | EA | 302.76 | 30,882 |
| **** Total FIRE EXT,CABINETS&ACCESS** | | | | | **43,678** |
| **TOILET & BATH ACCESSORIES** | | | | | |
| 10800.105 | 42" Grab Bar | 72 | EA | 97.38 | 7,011 |
| 10800.151 | Surface Mounted Double Roll Toilet Paper Holder | | EA | 45.95 | |
| 10800.170 | Surface Mounted Sanitary Napkin Vendor | 28 | EA | 277.38 | 7,767 |
| 10800.174 | Surface Mounted Sanitary Napkin Disposal | 53 | EA | 69.17 | 3,666 |
| 10800.200 | Surface Mounted Paper Towel Holder | | EA | 75.95 | |
| 10800.203 | Recessed Waste Receptacle | | EA | 254.76 | |
| 10800.400 | Liquid Soap Dispenser | | EA | 50.95 | |
| 10800.607 | Robe Hook | 60 | EA | 32.95 | 1,977 |
| 10800.609 | Mop Rack | 5 | EA | 60.95 | 305 |
| 10800.610 | Electric Hand Dryer | | EA | 302.38 | |
| 10810.100 | 30"x30" Framed Mirror | 69 | EA | 212.38 | 14,654 |
| 10810.109 | Baby Changing Station | 4 | EA | 354.76 | 1,419 |
| **** Total TOILET & BATH ACCESSORIES** | | | | | **36,799** |
| *** Total 10 - SPECIALTIES** | | | | | **779,615** |
| **11 - EQUIPMENT** | | | | | |
| **LOADING DOCK EQUIPMENT** | | | | | |
| 11160.005 | 50,000 lbs Capacity; 6'x6' Hydraulic Dock Leveler | 1 | EA | 9,179.73 | 9,180 |
| 11160.043 | Rubber Dock Bumper 4 1/2"x14"x12" | 4 | EA | 166.38 | 666 |
| **** Total LOADING DOCK EQUIPMENT** | | | | | **9,845** |
| **FOOD SERVICE EQUIPMENT** | | | | | |
| 11400.040 | Kitchen Equipment Allowance | 1 | LS | 533,715.00 | 533,715 |
| 11400.050 | Appliance Allowance | 1 | LS | 20,000.00 | 20,000 |
| **** Total FOOD SERVICE EQUIPMENT** | | | | | **553,715** |
| **ATHLETIC & RECREATION** | | | | | |
| 11480.000 | Gym Wall Padding - 7' 4" Ht | 478 | LF | 100.00 | 47,800 |

Job #: 15027
Project Size: 310380 SF
Detail - With Taxes and Insurance

Estimator: KN, JB, MT, AM
Group 1: Major ItemCode Groups
Group 2: Minor ItemCode Groups

| Item Code | Description | Quantity | UM | Total UnitCost | Total Cost |
|---|---|---|---|---|---|
| 11480.006 | OUTDOOR SCOREBOARDS - NOT INCLUDED | | | | |
| 11480.010 | Scoreboard/ Shot Clock | 2 | EA | 8,500.00 | 17,000 |
| 11480.020 | Basketball Hoop | 12 | EA | 5,400.00 | 64,800 |
| 11480.030 | Volley Ball Net w/ Floor Inserts | 4 | EA | 1,900.00 | 7,600 |
| 11480.062 | Plastic Telescoping Stands - Hussey Maxam 26 Motorized Bleachers | 600 | EA | 110.00 | 66,000 |
| 11482.065 | Gym Divider Curtain | 170 | LF | 160.00 | 27,200 |
| 11482.075 | Mat Mover | 3 | EA | 10,000.00 | 30,000 |
| 11482.080 | Install Owner Provided Batting Cage | 1 | LS | 8,831.35 | 8,831 |
| 11482.085 | Install Owner Provided Climbing Wall | 1 | LS | 8,831.35 | 8,831 |
| **** Total ATHLETIC & RECREATION** | | | | | **278,063** |
| **THEATRICAL EQUIPMENT** | | | | | |
| 11650.000 | Stage Set Fastening Equipment - In Line set Allowance | | | | |
| 11653.000 | Auditorium Seating (850 Seats) | 1 | LS | 172,359.00 | 172,359 |
| 11654.000 | Line Sets & Shell Allowance - Auditorium | 1 | LS | 175,000.00 | 175,000 |
| 11656.000 | Indoor Kiln | 1 | EA | 6,000.00 | 6,000 |
| **** Total THEATRICAL EQUIPMENT** | | | | | **353,359** |
| *** Total 11 - EQUIPMENT** | | | | | **1,194,982** |
| **12 - FURNISHINGS** | | | | | |
| **MANUF CABINETS & CASEWORK** | | | | | |
| 12300.010 | Base Cabinets | 1,858 | LF | 165.44 | 307,393 |
| 12300.048 | Wall Cabinets - Plastic Laminate | 190 | LF | 142.95 | 27,160 |
| 12300.048 | Wall Cabinets - Plastic Laminate | 930 | LF | 142.95 | 132,940 |
| 12300.050 | Full Height Storage Cabinets (2' x 3') - Plastic Laminate | 143 | EA | 525.00 | 75,075 |
| 12300.200 | Countertops-Plastic Laminate, Wall Mounted | 64 | LF | 109.92 | 7,035 |
| 12300.210 | Countertops-Plastic Laminate | 283 | LF | 94.92 | 26,862 |
| 12300.310 | Countertops - Epoxy Resin, Wall Mounted | 205 | LF | 192.94 | 39,553 |
| 12300.315 | Countertops - Epoxy Resin | 1,447 | LF | 177.94 | 257,479 |
| 12300.320 | Epoxy Resin Tables | 823 | LF | 187.36 | 154,197 |
| **** Total MANUF CABINETS & CASEWORK** | | | | | **1,027,694** |
| **WINDOW TREATMENT** | | | | | |
| 12500.010 | Manual Roller Shades | 7,651 | SF | 11.00 | 84,161 |
| 12500.016 | Horizontal Louver Miniblinds | 3,912 | SF | 14.00 | 54,768 |
| **** Total WINDOW TREATMENT** | | | | | **138,929** |
| **RUGS & MATS** | | | | | |
| 12671.107 | Walk-Off Foot Grilles (Alum Grid W/ Vinyl Insert, Frame, & Pan) | 650 | SF | 60.00 | 39,000 |
| **** Total RUGS & MATS** | | | | | **39,000** |
| *** Total 12 - FURNISHINGS** | | | | | **1,205,623** |
| **13 - SPECIAL CONSTRUCTION** | | | | | |
| **PRE-ENGINEERED STRUCTURES** | | | | | |
| 13125.000 | Pre-Engineered Merry Go Round - Covered Round Pen - In FFE Budget | 1 | LS | | |
| 13125.020 | Lester Buildings - Animal Science Building / Barn: Exterior Wall and Roof Framing, Metal Roofing, Exposed Fastener Siding, Exterior Doors, Yellow Pine Stalls | 1 | LS | 450,000.00 | 450,000 |
| 13125.025 | Design Animal Science Building / Barn to $1,200,000 | 1 | LS | -321,583.18 | -321,583 |
| 13125.030 | 42' x 18' Canopy - Tractor/Hay Storage | 756 | SF | 35.00 | 26,460 |
| **** Total PRE-ENGINEERED STRUCTURES** | | | | | **154,877** |
| *** Total 13 - SPECIAL CONSTRUCTION** | | | | | **154,877** |
| **14 - CONVEYING SYSTEMS** | | | | | |

Job #: 15027
Project Size: 310380 SF
Detail - With Taxes and Insurance

Estimator: KN, JB, MT, AM
Group 1: Major ItemCode Groups
Group 2: Minor ItemCode Groups

| Item Code | Description | Quantity | UM | Total UnitCost | Total Cost |
|---|---|---|---|---|---|
| | **ELEVATORS** | | | | |
| 14200.115 | Hydraulic Passenger Elevator A | 3 | STOP | 37,000.00 | 111,000 |
| 14200.115 | Hydraulic Passenger Elevator B | 2 | STOP | 37,000.00 | 74,000 |
| **** Total ELEVATORS** | | | | | **185,000** |
| *** Total 14 - CONVEYING SYSTEMS** | | | | | **185,000** |
| | **15 - PLUMBING** | | | | |
| | **EQUIPMENT** | | | | |
| 15401.336 | Domestic Water Heater, Commercial Gas-Fired (NG/P) Atmospheric, Std. Controls, 200 MBH Input | 1 | EA | 1,847.00 | 1,847 |
| 15401.336 | Domestic Water Heater, Commercial Gas-Fired (NG/P) Atmospheric, Std. Controls, 200 MBH Input - Added Scope | 1 | EA | 7,078.00 | 7,078 |
| 15401.344 | Domestic Water Heater, Commercial Gas-Fired (NG/P) Atmospheric, Std. Controls, 500 MBH Input | 2 | EA | 20,161.71 | 40,323 |
| 15401.344 | Domestic Water Heater, Commercial Gas-Fired (NG/P) Atmospheric, Std. Controls, 500 MBH Input - Added Scope | 1 | EA | 659.00 | 659 |
| 15401.554 | Potable Water Storage Tank, Indoor, Glass-Lined PE, 605 Gal., 48" OD, 87" Long | 1 | EA | 14,258.38 | 14,258 |
| 15401.556 | Round, Stainless Steel, 26 ga., 8" OD - Water Heater Vent | 180 | LF | 28.30 | 5,094 |
| 15402.452 | Sump Pump, Wet-Pit Mounted, Vertical, Single Stage, 25 GPM, 1 HP, 1-1/2" Disch. | 2 | EA | 4,055.67 | 8,111 |
| **** Total EQUIPMENT** | | | | | **77,371** |
| | **FIXTURES & TRIM** | | | | |
| 15410.208 | Comm. Water Closet, Floor Mounted VC, Flush Valve, Bowl only, incl. Seat, w/Floor Outlet 1.28 gpf ADA | 77 | EA | 753.67 | 58,033 |
| 15410.210 | Rough-In, Supply, Waste and Vent for Comm. Floor Mounted WC | 77 | EA | 562.00 | 43,274 |
| 15410.404 | Urinal, Wall Hung VC w/ Hanger and Valve, Water Saving 0.5 gpf | 18 | EA | 843.38 | 15,181 |
| 15410.406 | Rough-In, Supply, Waste and Vent for Wall Hung Urinal | 18 | EA | 705.00 | 12,690 |
| 15410.501 | Boot Washing Station, Floor Mount w/Trim | 1 | EA | 758.20 | 758 |
| 15410.640 | Rough-In, Supply, Waste and Vent for Res. Vanity Top Lavatories | 77 | EA | 547.00 | 42,119 |
| 15410.652 | Res. Lavatory w/Trim, Wall Hung, VC, 18"x15" w/Backsplash | 77 | EA | 347.59 | 26,764 |
| 15410.694 | Sink w/Faucet and Drain, SS Self Rimming, 25"x22" Single Bowl (Misc Lav, Office Sink) | 8 | EA | 805.71 | 6,446 |
| 15410.694 | Sink w/Faucet and Drain, SS Self Rimming, 25"x22" Single Bowl (Misc Lav, Office Sink, P-21) | 16 | EA | 805.71 | 12,891 |
| 15410.698 | Sink w/Faucet and Drain, SS Self Rimming, 43"x22" Double Bowl (Lav-Music/Band Room) | 3 | EA | 1,286.48 | 3,859 |
| 15410.702 | Rough-In, Supply, Waste and Vent for Sinks | 27 | EA | 702.00 | 18,954 |
| 15410.816 | Countertop SS Sink w/Faucet and Strainer, ADA, 37"x17" Single Bowl, Art Sink, Drop In | 5 | EA | 1,885.44 | 9,427 |
| 15410.817 | Countertop SS Sink w/Faucet and Strainer, ADA, 37"x17" Single Bowl, Art Sink, Stand Up | 4 | EA | 2,135.44 | 8,542 |
| 15410.818 | Rough-In, Supply, Waste and Vent for SS Sinks, Art Sinks | 9 | EA | 841.33 | 7,572 |
| 15410.830 | Laboratory Sink, Corrosion Resistant, 32"x14"x10" Sink | 99 | EA | 614.00 | 60,786 |

Job #: 15027
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Group 1: Major ItemCode Groups
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| Item Code | Description | Quantity | UM | Total UnitCost | Total Cost |
|---|---|---|---|---|---|
| 15410.832 | Rough-In, Supply, Waste and Vent for Laboratory Sinks | 99 | EA | 461.00 | 45,639 |
| 15410.834 | Laboratory Faucet, Gooseneck Spout, Wrist Handles | 99 | EA | 235.80 | 23,344 |
| 15410.840 | Mop Sink Basin, Floor (Corner), PE, 28"x28" w/Rim Guard | 6 | EA | 1,233.66 | 7,402 |
| 15410.844 | Rough-In, Supply, Waste and Vent for Floor Mop Sink Basin | 6 | EA | 1,827.00 | 10,962 |
| 15411.101 | Hose Bibb, Exterior Freeze-Proof, Lockable | 10 | EA | 105.40 | 1,054 |
| 15411.110 | Dog Bathtub, 66"x36"x20" Deep | 5 | EA | 1,973.36 | 9,867 |
| 15411.314 | Stall Shower, One-Piece Fiberglass w/Three Walls, Drain Only, 32" Square | 10 | EA | 645.94 | 6,459 |
| 15411.326 | Thermostatic Valve for Shower | 10 | EA | 585.00 | 5,850 |
| 15411.328 | Rough-In, Supply, Waste and Vent for Shower | 10 | EA | 818.00 | 8,180 |
| 15411.604 | Group Wash Fountain, Foot Control, Terrazo, 36" Semicircle, 3 People, P-22 | 4 | EA | 4,193.67 | 16,775 |
| 15411.630 | Rough-In, Supply, Waste and Vent for Wash Fountain | 4 | EA | 1,108.34 | 4,433 |
| 15411.901 | Emergency Shower, Single Head, Drench, Ball Valve, Pull Style, Freestanding, No Rough-In | 15 | EA | 573.80 | 8,607 |
| 15411.908 | Emergency Eyewash Fountain, SS Bowl, Pedestal Mount, No Rough-In | 15 | EA | 533.80 | 8,007 |
| 15412.222 | Electric Water Cooler, Wall Mounted, Full Recessed, SS, Bi-Level | 7 | EA | 1,871.46 | 13,100 |
| 15412.236 | Rough-In, Supply, Waste and Vent for Electric Water Cooler | 7 | EA | 504.00 | 3,528 |
| 15412.434 | Floor Drain, Heavy Duty, Galvanized w/ Sediment Bucket, 12" OD Grate, 4" Pipe Size | 34 | EA | 1,131.14 | 38,459 |
| 15412.614 | Grease Interceptor, Under Counter, Steel, 50 GPM, 100 LB Fat Capacity (Included in Kitchen Allowance) | 2 | EA | | |
| 15412.728 | Roof Drain, Integral Expansion Joint, Galvanized, 12" Dome, 4" Pipe Size, Primary / Emergency | 72 | EA | 1,074.20 | 77,342 |
| 15412.806 | Trench Drain, Polyester Polymer Concrete, 12" Internal Width w/Heavy Duty Galvanized Grate | 4 | EA | 1,595.00 | 6,380 |
| 15413.106 | Cleanout, Floor Type, Heavy Duty, Round, 4" Pipe Size | 25 | EA | 384.00 | 9,600 |
| 15413.110 | Cleanout, Floor Type, Heavy Duty, Round, 6" Pipe Size | 20 | EA | 508.20 | 10,164 |
| 15414.000 | Solids Interceptor | 9 | EA | 1,137.00 | 10,233 |
| 15414.104 | Water Meter, UL/FM Approved, 4" Main x 2" By-Pass, 700 GPM | 1 | EA | 7,551.40 | 7,551 |
| 15414.122 | Water Meter, Bronze, Comm./Dom., Threaded/Flanged, 2" OD, 160 GPM | 1 | EA | 518.33 | 518 |
| 15414.126 | Water Meter, Bronze, Comm./Dom., Flanged, 4" OD, 320 GPM | 1 | EA | 5,394.02 | 5,394 |
| **** Total FIXTURES & TRIM** | | | | | **666,146** |
| **DOMESTIC PIPING** | | | | | |
| 15420.104 | Copper Type L, Solder Joint W/Couplings And Hangers 10ft OD, 1/2" OD | 5,125 | LF | 8.81 | 45,176 |
| 15420.106 | Copper Type L, Solder Joint W/Couplings And Hangers 10ft OC, 3/4" OD | 2,690 | LF | 10.64 | 28,612 |
| 15420.108 | Copper Type L, Solder Joint W/Couplings And Hangers 10ft OC, 1" OD | 1,170 | LF | 14.02 | 16,398 |
| 15420.112 | Copper Type L, Solder Joint W/Couplings And Hangers 10ft OC, 1-1/2" OD | 60 | LF | 22.82 | 1,369 |
| 15420.114 | Copper Type L, Solder Joint W/Couplings And Hangers 10ft OC, 2" OD | 4,475 | LF | 31.93 | 142,871 |

Job #: 15027
Project Size: 310380 SF
Detail - With Taxes and Insurance

Estimator: KN, JB, MT, AM
Group 1: Major ItemCode Groups
Group 2: Minor ItemCode Groups

| Item Code | Description | Quantity | UM | Total UnitCost | Total Cost |
|---|---|---|---|---|---|
| 15421.000 | Black Steel, Schedule 40, Welded W/Couplings And Hangers, 10ft OC, 3" OD | 950 | LF | 35.66 | 33,874 |
| 15421.001 | Black Steel, Schedule 40, Welded W/Couplings And Hangers, 10ft OC, 4" OD | 1,600 | LF | 45.02 | 72,039 |
| 15421.102 | Fiberglass 1" Insulation With All Service Jacket 1/2" Pipe | 5,125 | LF | 3.91 | 20,013 |
| 15421.104 | Fiberglass 1" Insulation With All Service Jacket 3/4" Pipe | 2,690 | LF | 3.96 | 10,659 |
| 15421.106 | Fiberglass 1" Insulation With All Service Jacket 1" Pipe | 1,170 | LF | 4.16 | 4,868 |
| 15421.202 | Fiberglass 1-1/2" Insulation With All Service Jacket 1-1/2" Pipe | 60 | LF | 5.67 | 340 |
| 15421.204 | Fiberglass 1-1/2" Insulation With All Service Jacket 2" Pipe | 4,475 | LF | 5.87 | 26,273 |
| 15421.208 | Fiberglass 1-1/2" Insulation With All Service Jacket 3" Pipe | 950 | LF | 6.79 | 6,451 |
| 15421.212 | Fiberglass 1-1/2" Insulation With All Service Jacket 4" Pipe | 1,600 | LF | 7.78 | 12,454 |
| 15421.500 | Valves and Accessories | 1 | LS | 40,000.00 | 40,000 |
| 15421.500 | Valves and Accessories | 1 | LS | 110,000.00 | 110,000 |
| **** Total DOMESTIC PIPING** | | | | | **571,397** |
| **SANITARY DWV** | | | | | |
| 15440.080 | UG PVC, Schedule 40, 2" | 1,175 | LF | 9.76 | 11,466 |
| 15440.084 | UG PVC, Schedule 40, 4" | 3,325 | LF | 15.03 | 49,984 |
| 15440.086 | UG PVC, Schedule 40, 6" | 2,100 | LF | 23.56 | 49,470 |
| 15440.144 | AG ABS, Schedule 40, w/ Hangers, 2" | 3,250 | LF | 16.90 | 54,929 |
| 15440.148 | AG ABS, Schedule 40, w/ Hangers, 4" | 2,150 | LF | 25.57 | 54,976 |
| 15440.150 | AG ABS, Schedule 40, w/ Hangers, 6" | 10 | LF | 41.98 | 420 |
| 15440.382 | Corrosion Resistant Pipe, Sch. 40 Polypropylene, No Coupling/Hangers, 2" OD - GW | 950 | LF | 24.95 | 23,703 |
| 15440.386 | Corrosion Resistant Pipe, Sch. 40 Polypropylene, No Coupling/Hangers, 4" OD - GW | 1,400 | LF | 45.25 | 63,347 |
| 15440.500 | Acid Neutralization Tank | 1 | EA | 17,500.00 | 17,500 |
| **** Total SANITARY DWV** | | | | | **325,794** |
| **STORM DRAIN** | | | | | |
| 15450.202 | UG PVC, Schedule 40, 8" | 160 | LF | 33.25 | 5,320 |
| 15450.410 | Sch40 PVC W/Couplings and Hangers, 10ft OC, 4" OD | 1,900 | LF | 25.33 | 48,133 |
| 15450.411 | Sch40 PVC W/Couplings and Hangers, 10ft OC, 5" OD | 600 | LF | 33.32 | 19,992 |
| 15450.412 | Sch40 PVC W/Couplings and Hangers, 10ft OC, 6" OD | 1,100 | LF | 38.16 | 41,976 |
| 15450.414 | Sch40 PVC W/Couplings and Hangers, 10ft OC, 8" OD | 775 | LF | 53.67 | 41,592 |
| 15451.138 | Fiberglass 1-1/2" Insulation With All Service Jacket 4" Pipe | 1,900 | LF | 8.04 | 15,276 |
| 15451.139 | Fiberglass 1-1/2" Insulation With All Service Jacket 5" Pipe | 600 | LF | 9.34 | 5,604 |
| 15451.140 | Fiberglass 1-1/2" Insulation With All Service Jacket 6" Pipe | 1,100 | LF | 9.97 | 10,962 |
| 15451.142 | Fiberglass 1-1/2" Insulation With All Service Jacket 8" Pipe | 775 | LF | 12.83 | 9,943 |
| **** Total STORM DRAIN** | | | | | **198,798** |
| **GAS PIPING** | | | | | |
| 15460.200 | Valves and Accessories | 1 | LS | 5,000.00 | 5,000 |
| 15460.200 | Valves and Accessories | 1 | LS | 50,000.00 | 50,000 |

Job #: 15027
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Detail - With Taxes and Insurance

Estimator: KN, JB, MT, AM
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Group 2: Minor ItemCode Groups

| Item Code | Description | Quantity | UM | Total UnitCost | Total Cost |
|---|---|---|---|---|---|
| 15460.201 | Lab Gas Outlet, Recessed Wall Outlet, Single | 104 | EA | 71.50 | 7,436 |
| 15460.202 | Black Steel, Schedule 40, Threaded W/Couplings And Hangers, 10ft OC, 1/2" OD | 1,040 | LF | 9.72 | 10,104 |
| 15460.210 | Black Steel, Schedule 40, Threaded W/Couplings And Hangers, 10ft OC, 1-1/2" OD | 475 | LF | 16.90 | 8,028 |
| 15460.212 | Black Steel, Schedule 40, Threaded W/Couplings And Hangers, 10ft OC, 2" OD | 600 | LF | 21.70 | 13,020 |
| 15460.312 | Black Steel, Schedule 40, Welded W/Couplings And Hangers, 10ft OC, 3" OD | 1,385 | LF | 35.66 | 49,385 |
| 15460.316 | Black Steel, Schedule 40, Welded W/Couplings And Hangers, 10ft OC, 4" OD | 650 | LF | 45.02 | 29,266 |
| 15460.318 | Black Steel, Schedule 40, Welded W/Couplings And Hangers, 10ft OC, 6" OD | 550 | LF | 89.63 | 49,299 |
| 15460.320 | Black Steel, Schedule 40, Welded W/Couplings And Hangers, 10ft OC, 8" OD | 360 | LF | 126.51 | 45,544 |
| 15460.322 | Black Steel, Schedule 40, Welded W/Couplings And Hangers, 10ft OC, 10" OD | 25 | LF | 159.17 | 3,979 |
| 15460.400 | Gas Safety Shut-Off, 1-1/2" | 8 | EA | 255.00 | 2,040 |
| ** Total GAS PIPING | | | | | **273,101** |
| **COMPRESSED AIR** | | | | | |
| 15470.090 | Air Compressor, Reciprocating, Air-Cooled, Tank Mounted, Two Stage, 3 Phase, 105 CFM @ 125 PSI, 25 HP, 250 Gal. Tank | 1 | EA | 14,100.00 | 14,100 |
| 15470.100 | Copper Type L, Solder Joint W/Couplings And Hangers 10ft OC, 3/4" OD - CA | 250 | LF | 10.64 | 2,659 |
| 15470.102 | Copper Type L, Solder Joint W/Couplings And Hangers 10ft OC, 1" OD | 70 | LF | 14.02 | 981 |
| 15470.104 | Copper Type L, Solder Joint W/Couplings And Hangers 10ft OC, 1-1/4" OD | 70 | LF | 18.84 | 1,319 |
| 15470.212 | Compressed Air Outlet, Recessed Wall, Single | 6 | EA | 123.75 | 743 |
| 15470.300 | Bronze Ball Valve, Soldered, 3/4" | 4 | EA | 49.41 | 198 |
| 15470.302 | Bronze Ball Valve, Soldered, 1-1/4" | 1 | EA | 83.33 | 83 |
| ** Total COMPRESSED AIR | | | | | **20,082** |
| **MISCELLANEOUS** | | | | | |
| 15495.000 | Kitchen Rough-In | 2 | LS | 15,000.00 | 30,000 |
| 15495.004 | Commissioning Support | 1 | LS | 16,000.00 | 16,000 |
| 15495.004 | Commissioning Support | 1 | LS | 45,000.00 | 45,000 |
| 15495.006 | Coordination & Management | 1 | LS | 21,000.00 | 21,000 |
| 15495.006 | Coordination & Management | 1 | LS | 55,000.00 | 55,000 |
| 15495.008 | Coring & Patching & Firestopping | 1 | LS | 15,000.00 | 15,000 |
| 15495.008 | Coring & Patching & Firestopping | 1 | LS | 25,000.00 | 25,000 |
| 15495.010 | Flushing & Sanitizing | 1 | LS | 5,000.00 | 5,000 |
| 15495.010 | Flushing & Sanitizing | 1 | LS | 15,000.00 | 15,000 |
| 15495.018 | Fees & Permits ($15/$1000) - Waived | 2 | LS | | |
| ** Total MISCELLANEOUS | | | | | **227,000** |
| * Total 15 - PLUMBING | | | | | **2,359,689** |
| **15 - FIRE PROTECTION** | | | | | |
| **WET SPRINKLER** | | | | | |
| 15502.002 | Fire Service Main - 6" Ductile Iron, Mech. Joint | 50 | LF | 29.06 | 1,453 |
| 15502.022 | 4" Double Check Backflow Preventer W/OS&Y Valves, 4 Test Cocks | 1 | EA | 3,747.00 | 3,747 |
| 15502.024 | 6" Double Check Backflow Preventer W/OS&Y Valves, 4 Test Cocks | 1 | EA | 5,847.73 | 5,848 |
| 15502.108 | FDC - Two Way Siamese - 3x3x4 | 2 | EA | 1,189.60 | 2,379 |
| 15502.116 | 4" Zone Flow Control Valve W/Trim And Gauges | 18 | EA | 6,009.14 | 108,165 |
| 15502.128 | Tamper Switch | 18 | EA | 153.65 | 2,766 |

| Item Code | Description | Quantity | UM | Total UnitCost | Total Cost |
|---|---|---|---|---|---|
| 15502.202 | Sprinkler Main Sch 40 BS - 4", Grooved Joint, W/Hangers 10 Ft O.C. | 8,450 | LF | 39.75 | 335,884 |
| 15502.222 | Sprinkler Branch Sch 40 BS - 1" Threaded W/ Hangers 10 Ft O.C. | 17,560 | LF | 12.53 | 220,023 |
| 15502.226 | Sprinkler Branch Sch 40 BS - 1-1/2" Threaded W/ Hangers 10 Ft O.C. | 8,700 | LF | 16.39 | 142,593 |
| 15502.400 | Sprinkler Heads - Standard Pendant, 1/2" NPT, 1/2" Orifice | 2,625 | EA | 36.43 | 95,616 |
| ** Total WET SPRINKLER | | | | | 918,473 |
| **DRY SPRINKLER** | | | | | |
| 15505.006 | 4" Dry Pipe Valve With Trim And Gauges | 1 | EA | 3,549.00 | 3,549 |
| 15505.012 | 30 Gal., 1 HP Comp Air Sys For Fire Protection | 1 | EA | 1,110.77 | 1,111 |
| 15505.202 | Sprinkler Main Sch 40 BS - 4", Grooved Joint, W/Hangers 10 Ft O.C. | 105 | LF | 40.66 | 4,269 |
| 15505.222 | Sprinkler Branch Sch 40 BS - 1" Threaded W/ Hangers 10 Ft O.C. | 315 | LF | 12.95 | 4,078 |
| 15505.400 | Sprinkler Heads - Standard Upright, 1/2" NPT, 1/2" Orifice | 31 | EA | 37.85 | 1,173 |
| ** Total DRY SPRINKLER | | | | | 14,180 |
| **STANDPIPE** | | | | | |
| 15525.004 | Sprinkler Main Sch 40 BS - 4", Grooved Joint, W/Hangers 10 Ft O.C. | 300 | LF | 39.75 | 11,925 |
| 15525.102 | Fd Standpipe Angle Valve, 2-1/2", Brass, W/Wheel, Handle Chain And Cap | 10 | EA | 287.34 | 2,873 |
| ** Total STANDPIPE | | | | | 14,798 |
| **MISCELLANEOUS** | | | | | |
| 15535.002 | Coordination & Management | 1 | LS | 20,000.00 | 20,000 |
| 15535.010 | Hydraulic Calculations | 1 | LS | 12,000.00 | 12,000 |
| 15535.016 | Coring & Patching & Firestopping | 1 | LS | 17,500.00 | 17,500 |
| 15535.024 | Fees & Permits ($15/$1000) - Waived | 1 | LS | | |
| ** Total MISCELLANEOUS | | | | | 49,500 |
| * Total 15 - FIRE PROTECTION | | | | | 996,951 |
| **15 - HVAC** | | | | | |
| **AIR HANDLING EQUIPMENT** | | | | | |
| 15620.102 | ERV-1, 3600 CFM (Material Cost in TRANE pckg price) | 1 | EA | 800.00 | 800 |
| 15620.323 | MAU-1/2/3 | 3 | EA | 386.92 | 1,161 |
| 15620.401 | HV-1/2/5, 6000 CFM, 480 MBH | 3 | EA | 1,120.00 | 3,360 |
| 15620.402 | HV-3, 3000 CFM, 240 MBH | 1 | EA | 644.00 | 644 |
| 15620.403 | HV-4, 8000 CFM, 560 MBH | 1 | EA | 1,680.00 | 1,680 |
| 15620.421 | RTU 1-2, Stnd Controls, Curb, Econ., Multi-Zone, 4000 CFM | 2 | EA | 2,907.71 | 5,815 |
| 15620.422 | RTU 3, Stnd Controls, Curb, Econ., Multi-Zone, 5000 CFM | 1 | EA | 2,907.71 | 2,908 |
| 15620.423 | RTU 4, Stnd Controls, Curb, Econ., Multi-Zone, 2500 CFM | 1 | EA | 2,907.71 | 2,908 |
| 15620.424 | RTU 5, Stnd Controls, Curb, Econ., Multi-Zone, 7400 CFM | 1 | EA | 2,907.71 | 2,908 |
| 15620.425 | RTU 6, Stnd Controls, Curb, Econ., Multi-Zone, 10,000 CFM | 1 | EA | 2,907.71 | 2,908 |
| 15620.426 | RTU 7, Stnd Controls, Curb, Econ., Multi-Zone, 7000 CFM | 1 | EA | 2,907.71 | 2,908 |
| 15620.427 | RTU 8, Stnd Controls, Curb, Econ., Multi-Zone, 9110 CFM | 1 | EA | 2,907.71 | 2,908 |
| 15620.428 | RTU 9, Stnd Controls, Curb, Econ., Multi-Zone, 7000 CFM | 1 | EA | 2,907.71 | 2,908 |

Job #: 15027
Project Size: 310380 SF
Detail - With Taxes and Insurance

Estimator: KN, JB, MT, AM
Group 1: Major ItemCode Groups
Group 2: Minor ItemCode Groups

| Item Code | Description | Quantity | UM | Total UnitCost | Total Cost |
|---|---|---|---|---|---|
| 15620.429 | RTU 10, Stnd Controls, Curb, Econ., Multi-Zone, 13,000 CFM | 1 | EA | 2,907.71 | 2,908 |
| 15620.430 | RTU 11, Stnd Controls, Curb, Econ., Multi-Zone, 3500 CFM | 1 | EA | 2,907.71 | 2,908 |
| 15620.431 | RTU 12,14, Stnd Controls, Curb, Econ., Multi-Zone, 8000 CFM | 2 | EA | 2,907.71 | 5,815 |
| 15620.432 | RTU 13, Stnd Controls, Curb, Econ., Multi-Zone, 2755 CFM | 1 | EA | 2,907.71 | 2,908 |
| 15620.433 | RTU 15,17, Stnd Controls, Curb, Econ., Multi-Zone, 12,500 CFM | 2 | EA | 2,907.71 | 5,815 |
| 15620.434 | RTU 16, Stnd Controls, Curb, Econ., Multi-Zone, 10,500 CFM | 1 | EA | 2,907.71 | 2,908 |
| 15620.435 | RTU 18, Stnd Controls, Curb, Econ., Multi-Zone, 12,000 CFM | 1 | EA | 2,907.71 | 2,908 |
| 15620.436 | RTU 19, Stnd Controls, Curb, Econ., Multi-Zone, 8000 CFM | 1 | EA | 2,907.71 | 2,908 |
| 15620.500 | TRANE Package (RTU's, MUA's, HV's, ERV, Chiller) w/Factory Mounted Controls | 1 | LS | 600,000.00 | 600,000 |
| 15620.500 | TRANE Package (RTU's, MUA's, HV's, ERV, Chiller) w/Factory Mounted Controls | 1 | LS | 1,500,000.00 | 1,500,000 |
| 15624.001 | Split System, Ductless, Cooling Only, Single Zone, 3/4 Ton | 16 | EA | 2,244.00 | 35,904 |
| 15624.002 | Split System, Ductless, Cooling Only, Single Zone, 1-1/4 Ton | 2 | EA | 2,990.00 | 5,980 |
| 15624.003 | Split System, Ductless, Cooling Only, Single Zone, 1-1/2 Ton | 2 | EA | 3,530.00 | 7,060 |
| 15624.004 | ACC-1, 14 Ton | 1 | EA | 4,569.98 | 4,570 |
| **** Total AIR HANDLING EQUIPMENT** | | | | | **2,216,405** |
| **FANS** | | | | | |
| 15630.226 | Rooftop Exhaust Fan, 1000 CFM | 9 | EA | 1,680.56 | 15,125 |
| 15630.228 | Rooftop Exhaust Fan, 1500 CFM | 9 | EA | 2,180.56 | 19,625 |
| 15630.416 | Kitchen Exhaust Fan, Centrifugal, 4000 CFM, Culinary Kitchen | 1 | EA | 4,215.33 | 4,215 |
| 15630.416 | Kitchen Exhaust Fan, Centrifugal, 4000 CFM, Kitchen | 1 | EA | 4,215.33 | 4,215 |
| 15630.500 | 8ft Fume Hood, Fan, Ductwork | | EA | 5,500.00 | |
| 15630.502 | 4ft Fume Hood, Fan, Ductwork | 13 | EA | 4,250.00 | 55,250 |
| **** Total FANS** | | | | | **98,431** |
| **HEATING EQUIPMENT** | | | | | |
| 15640.112 | Hot Water Condensing Boiler, Packaged w/Controls/Circulator/Trim, NG, 330 MBH | 2 | EA | 10,214.00 | 20,428 |
| 15640.114 | Hot Water Condensing Boiler, Packaged w/Controls/Circulator/Trim, NG, 2500 MBH | 4 | EA | 47,916.00 | 191,664 |
| **** Total HEATING EQUIPMENT** | | | | | **212,092** |
| **COOLING EQUIPMENT** | | | | | |
| 15650.002 | Glycol Treatment System | 1 | LS | 8,000.00 | 8,000 |
| 15651.005 | Chiller, Air Cooled, High Efficiency, 35 Ton (Material Cost in TRANE Price) | 1 | EA | 4,427.00 | 4,427 |
| **** Total COOLING EQUIPMENT** | | | | | **12,427** |
| **MISC EQUIPMENT** | | | | | |
| 15660.004 | Vehicle Exhaust System, 11,000 CFM | 1 | LS | 25,000.00 | 25,000 |
| 15660.006 | Paint Booth Exhaust System, 10,000 CFM | 1 | LS | 25,000.00 | 25,000 |
| 15660.010 | Duct Collection System, 7500 CFM | 1 | LS | 87,000.00 | 87,000 |
| 15660.125 | In-Line, Centrifugal Boiler Pump, Cast Iron, Flange Conn., 2-1/2" | 2 | EA | 1,088.20 | 2,176 |
| 15660.130 | In-Line, Centrifugal Boiler Pump, Cast Iron, Flange Conn., 3" | 4 | EA | 2,404.00 | 9,616 |

Job #: 15027
Project Size: 310380 SF
Detail - With Taxes and Insurance

Estimator: KN, JB, MT, AM
Group 1: Major ItemCode Groups
Group 2: Minor ItemCode Groups

| Item Code | Description | Quantity | UM | Total UnitCost | Total Cost |
|---|---|---|---|---|---|
| 15660.202 | Hot Water Pump, Centrifugal, Base Mounted, End Suction, 76 gpm w/ VFD | 2 | EA | 4,096.31 | 8,193 |
| 15660.206 | Chilled Water Pump, Centrifugal, Base Mounted, End Suction, 88 gpm w / VFD | 2 | EA | 3,994.33 | 7,989 |
| 15660.206 | Hot Water Pump, Centrifugal, Base Mounted, End Suction, 680 gpm w/ VFD | 2 | EA | 17,994.33 | 35,989 |
| 15660.501 | Condensate Pump, Cooling, w/1 gallon ABS Tank, 115V, 1/50 HP, 200 gph | 20 | EA | 231.02 | 4,620 |
| ** Total MISC EQUIPMENT | | | | | **205,583** |
| **DUCTWORK & AIR DISTRIBUTION** | | | | | |
| 15680.042 | Sound Attenuator Device / Double Wall Ductwork (per RTU) | 57 | EA | 1,250.00 | 71,250 |
| 15680.112 | Galvanized Ductwork, > 5000 LB | 288,886 | LB | 7.50 | 2,166,616 |
| 15681.102 | Spiral Preformed, Galvanized Steel, 26 ga., 4" OD | 1,625 | LF | 4.16 | 6,760 |
| 15681.104 | Spiral Preformed, Galvanized Steel, 26 ga., 6" OD | 1,210 | LF | 4.81 | 5,820 |
| 15681.106 | Spiral Preformed, Galvanized Steel, 26 ga., 8" OD | 1,860 | LF | 6.61 | 12,295 |
| 15681.108 | Spiral Preformed, Galvanized Steel, 26 ga., 10" OD | 1,110 | LF | 8.26 | 9,169 |
| 15681.110 | Spiral Preformed, Galvanized Steel, 26 ga., 12" OD | 2,535 | LF | 10.55 | 26,744 |
| 15681.112 | Spiral Preformed, Galvanized Steel, 26 ga., 14" OD | 1,200 | LF | 14.55 | 17,460 |
| 15681.114 | Spiral Preformed, Galvanized Steel, 24 ga., 16" OD | 722 | LF | 19.40 | 14,007 |
| 15681.116 | Spiral Preformed, Galvanized Steel, 24 ga., 18" OD | 135 | LF | 22.80 | 3,078 |
| 15681.118 | Spiral Preformed, Galvanized Steel, 24 ga., 20" OD | 47 | LF | 26.66 | 1,253 |
| 15681.704 | PVC Duct, 8" OD | 150 | LF | 5.00 | 750 |
| 15681.706 | PVC Duct, 8" OD, 90deg Elbow | 12 | LF | 139.55 | 1,675 |
| 15681.708 | PVC Duct, 8" OD, Coupling | 12 | LF | 38.75 | 465 |
| 15681.710 | Combustion Air Louver | 16 | SF | 50.00 | 800 |
| 15684.102 | Duct Insulation, Blanket Type, Fiberglass, FSK, 1.0Lb Density, 1-1/2" Thick | 283,834 | SF | 2.53 | 718,952 |
| 15685.004 | Displacement Ventilation Diffuser | 425 | EA | 450.00 | 191,250 |
| 15685.618 | RGD's | 561 | EA | 80.64 | 45,239 |
| 15688.014 | Gas Vent, Double Wall, Galvanized Steel, UL Listed, 8" Dia. (75LF per Boiler exhaust, 50LF per DHWH exhaust) | 600 | LF | 48.66 | 29,198 |
| 15688.402 | Exhaust Hood Discharge Assembly | 19 | EA | 597.50 | 11,353 |
| ** Total DUCTWORK & AIR DISTRIBUTION | | | | | **3,334,132** |
| **TERMINAL UNITS** | | | | | |
| 15690.102 | Runtal Wall Radiation Units | 80 | LF | 106.60 | 8,528 |
| 15690.106 | Radiant Heating Panels, Ceiling | 4,560 | LF | 38.25 | 174,420 |
| 15691.004 | Cabinet Unit Heater, Horizontal, Ceiling, 60 MBH | 11 | EA | 1,617.26 | 17,790 |
| 15691.110 | Unit Heater, Heavy Duty, 480V, 15KW | 1 | EA | 1,418.92 | 1,419 |
| 15691.312 | Unit Heater, Hot Water, Horizontal, 47 MBH | 11 | EA | 717.26 | 7,890 |
| 15692.210 | Variable Air Volume Box, PI, w/ Damper, Actuator, T-Stat | 216 | EA | 580.00 | 125,280 |
| 15692.310 | Induction Unit | 149 | EA | 325.00 | 48,425 |
| ** Total TERMINAL UNITS | | | | | **383,752** |
| **HVAC PIPING** | | | | | |
| 15700.104 | Copper Type L, Solder Joint W/Couplings And Hangers 10ft OD, 1/2" OD, HWS/R | 2,660 | LF | 8.82 | 23,448 |

Job #: 15027
Project Size: 310380 SF
Detail - With Taxes and Insurance

Estimator: KN, JB, MT, AM
Group 1: Major ItemCode Groups
Group 2: Minor ItemCode Groups

| Item Code | Description | Quantity | UM | Total UnitCost | Total Cost |
|---|---|---|---|---|---|
| 15700.106 | Copper Type L, Solder Joint W/Couplings And Hangers 10ft OC, 3/4" OD, CHWS/R | 3,620 | LF | 10.93 | 39,549 |
| 15700.106 | Copper Type L, Solder Joint W/Couplings And Hangers 10ft OC, 3/4" OD, HWS/R | 12,030 | LF | 10.93 | 131,428 |
| 15700.108 | Copper Type L, Solder Joint W/Couplings And Hangers 10ft OC, 1" OD, CHWS/R | 1,000 | LF | 14.34 | 14,340 |
| 15700.108 | Copper Type L, Solder Joint W/Couplings And Hangers 10ft OC, 1" OD, HWS/R | 3,915 | LF | 14.34 | 56,141 |
| 15700.110 | Copper Type L, Solder Joint W/Couplings And Hangers 10ft OC, 1-1/4" OD, CHWS/R | 1,200 | LF | 18.84 | 22,608 |
| 15700.110 | Copper Type L, Solder Joint W/Couplings And Hangers 10ft OC, 1-1/4" OD, HWS/R | 2,040 | LF | 18.84 | 38,434 |
| 15700.112 | Copper Type L, Solder Joint W/Couplings And Hangers 10ft OC, 1-1/2" OD, CHWS/R | 850 | LF | 22.82 | 19,397 |
| 15700.112 | Copper Type L, Solder Joint W/Couplings And Hangers 10ft OC, 1-1/2" OD, HWS/R | 1,900 | LF | 22.82 | 43,358 |
| 15700.114 | Copper Type L, Solder Joint W/Couplings And Hangers 10ft OC, 2" OD, CHWS/R | 1,350 | LF | 32.45 | 43,808 |
| 15700.114 | Copper Type L, Solder Joint W/Couplings And Hangers 10ft OC, 2" OD, HWS/R | 1,085 | LF | 32.45 | 35,208 |
| 15700.116 | Copper Type L, Solder Joint W/Couplings And Hangers 10ft OC, 2-1/2" OD, CHWS/R | 650 | LF | 48.66 | 31,628 |
| 15700.116 | Copper Type L, Solder Joint W/Couplings And Hangers 10ft OC, 2-1/2" OD, HWS/R | 1,510 | LF | 48.66 | 73,473 |
| 15700.312 | Black Steel, Schedule 40, Welded W/Couplings And Hangers, 10ft OC, 3" OD, CHWS/R | 1,660 | LF | 35.66 | 59,191 |
| 15700.312 | Black Steel, Schedule 40, Welded W/Couplings And Hangers, 10ft OC, 3" OD, HWS/R | 950 | LF | 35.66 | 33,874 |
| 15700.316 | Black Steel, Schedule 40, Welded W/Couplings And Hangers, 10ft OC, 4" OD, HWS/R | 2,600 | LF | 45.02 | 117,064 |
| 15700.318 | Black Steel, Schedule 40, Welded W/Couplings And Hangers, 10ft OC, 6" OD, HWS/R | 425 | LF | 89.63 | 38,095 |
| 15700.320 | Black Steel, Schedule 40, Welded W/Couplings And Hangers, 10ft OC, 8" OD, HWS/R | 225 | LF | 126.51 | 28,465 |
| 15704.002 | Fiberglass 1/2" Insulation With All Service Jacket 1/2" Pipe, HWS/R | 2,660 | LF | 3.62 | 9,629 |
| 15704.104 | Fiberglass 1" Insulation With All Service Jacket 3/4" Pipe, CHWS/R | 3,620 | LF | 4.12 | 14,914 |
| 15704.104 | Fiberglass 1" Insulation With All Service Jacket 3/4" Pipe, HWS/R | 12,030 | LF | 4.12 | 49,564 |
| 15704.106 | Fiberglass 1" Insulation With All Service Jacket 1" Pipe, CHWS/R | 1,000 | LF | 4.33 | 4,325 |
| 15704.106 | Fiberglass 1" Insulation With All Service Jacket 1" Pipe, HWS/R | 4,915 | LF | 4.33 | 21,257 |
| 15704.108 | Fiberglass 1" Insulation With All Service Jacket 1-1/4" Pipe, CHWS/R | 1,200 | LF | 4.55 | 5,460 |
| 15704.108 | Fiberglass 1" Insulation With All Service Jacket 1-1/4" Pipe, HWS/R | 2,040 | LF | 4.55 | 9,282 |
| 15704.202 | Fiberglass 1-1/2" Insulation With All Service Jacket 1-1/2" Pipe, CHWS/R | 850 | LF | 5.67 | 4,820 |
| 15704.202 | Fiberglass 1-1/2" Insulation With All Service Jacket 1-1/2" Pipe, HWS/R | 1,900 | LF | 5.67 | 10,773 |
| 15704.204 | Fiberglass 1-1/2" Insulation With All Service Jacket 2" Pipe, CHWS/R | 1,350 | LF | 6.06 | 8,181 |

Job #: 15027
Project Size: 310380 SF
Detail - With Taxes and Insurance

Estimator: KN, JB, MT, AM
Group 1: Major ItemCode Groups
Group 2: Minor ItemCode Groups

| Item Code | Description | Quantity | UM | Total UnitCost | Total Cost |
|---|---|---|---|---|---|
| 15704.204 | Fiberglass 1-1/2" Insulation With All Service Jacket 2" Pipe, HWS/R | 1,085 | LF | 6.06 | 6,575 |
| 15704.306 | Fiberglass 2" Insulation With All Service Jacket 2-1/2" Pipe, CHWS/R | 650 | LF | 7.83 | 5,090 |
| 15704.306 | Fiberglass 2" Insulation With All Service Jacket 2-1/2" Pipe, HWS/R | 1,510 | LF | 7.83 | 11,823 |
| 15704.308 | Fiberglass 2" Insulation With All Service Jacket 3" Pipe, CHWS/R | 1,660 | LF | 8.32 | 13,811 |
| 15704.308 | Fiberglass 2" Insulation With All Service Jacket 3" Pipe, HWS/R | 950 | LF | 8.32 | 7,904 |
| 15704.312 | Fiberglass 2" Insulation With All Service Jacket 4" Pipe, HWS/R | 2,600 | LF | 9.99 | 25,961 |
| 15704.314 | Fiberglass 2" Insulation With All Service Jacket 6" Pipe, HWS/R | 425 | LF | 12.45 | 5,291 |
| 15704.316 | Fiberglass 2" Insulation With All Service Jacket 8" Pipe | 225 | LF | 15.40 | 3,465 |
| 15705.008 | Air Separator w/ Strainer, 4" Dia. | 3 | EA | 3,098.60 | 9,296 |
| 15706.210 | Expansion Tank, Steel, ASME, Rubber Diaphragm, 119 Gal. Accep. Vol. | 1 | EA | 4,141.00 | 4,141 |
| 15706.214 | Expansion Tank, Steel, ASME, Rubber Diaphragm, 211 Gal. Accep. Vol. | 2 | EA | 6,573.73 | 13,147 |
| 15706.300 | Buffer Tank, Indoor, Galvanized Steel, 80 Gal., 24" OD, Chilled Water | 1 | EA | 3,898.33 | 3,898 |
| 15708.102 | ARC Tubing, Type L Copper, Hard Tempered, No Couplings/Hangers, 3/8" | 1,200 | LF | 5.47 | 6,564 |
| 15708.106 | ARC Tubing, Type L Copper, Hard Tempered, No Couplings/Hangers, 5/8" | 1,200 | LF | 7.26 | 8,712 |
| 15708.110 | ARC Tubing, Type L Copper, Hard Tempered, No Couplings/Hangers, 7/8" | 150 | LF | 8.45 | 1,268 |
| 15708.112 | ARC Tubing, Type L Copper, Hard Tempered, No Couplings/Hangers, 1-1/8" | 150 | LF | 11.05 | 1,658 |
| 15708.300 | Schedule 40 PVC, w/ Hangers, 1-1/4", Condensate Drain | 770 | LF | 14.23 | 10,955 |
| 15708.500 | Valves & Accessories | 1 | LS | 10,000.00 | 10,000 |
| 15708.500 | Valves & Accessories | 1 | LS | 40,000.00 | 40,000 |
| 15708.500 | Valves & Accessories | 1 | LS | 150,000.00 | 150,000 |
| **** Total HVAC PIPING** | | | | | **1,327,272** |
| **CONTROLS** | | | | | |
| 15780.000 | TRANE BacNet Tracer Controls - Only w/TRANE Eqpmt | 1 | LS | 50,000.00 | 50,000 |
| 15780.000 | TRANE BacNet Tracer Controls - Only w/TRANE Eqpmt | 1 | LS | 250,000.00 | 250,000 |
| 15780.000 | TRANE BacNet Tracer Controls - Only w/TRANE Eqpmt | 1 | LS | 675,000.00 | 675,000 |
| **** Total CONTROLS** | | | | | **975,000** |
| **TEST & BALANCE** | | | | | |
| 15792.001 | Air & Water Balance | 308,992 | SF | 0.50 | 154,496 |
| **** Total TEST & BALANCE** | | | | | **154,496** |
| **SPECIAL** | | | | | |
| 15801.501 | Coordination & Management | 1 | LS | 50,000.00 | 50,000 |
| 15801.501 | Coordination & Management | 1 | LS | 150,000.00 | 150,000 |
| 15801.502 | Commissioning Support | 1 | LS | 16,250.00 | 16,250 |
| 15801.502 | Commissioning Support | 1 | LS | 48,750.00 | 48,750 |
| 15801.503 | Coring, Patching & Firestopping | 1 | LS | 10,000.00 | 10,000 |
| 15801.503 | Coring, Patching & Firestopping | 1 | LS | 30,000.00 | 30,000 |
| 15801.504 | Seismic Restraint | 1 | LS | 6,250.00 | 6,250 |
| 15801.504 | Seismic Restraint | 1 | LS | 18,750.00 | 18,750 |
| 15801.505 | Fees & Permits ($15/$1000) - Waived | 2 | LS | | |

Job #: 15027
Project Size: 310380 SF
Detail - With Taxes and Insurance

Estimator: KN, JB, MT, AM
Group 1: Major ItemCode Groups
Group 2: Minor ItemCode Groups

| Item Code | Description | Quantity | UM | Total UnitCost | Total Cost |
|---|---|---|---|---|---|
| | ** Total SPECIAL | | | | 330,000 |
| | *** Total 15 - HVAC** | | | | **9,249,589** |
| | **16 - ELECTRICAL** | | | | |
| | **SITE ELECTRICAL** | | | | |
| 16003.002 | Transformer / Primary ** ALLOWANCE ** | 1 | LS | 50,000.00 | 50,000 |
| 16005.008 | Primary Conduit Only - 5", (1)P, (1)S | 1,180 | LF | 6.75 | 7,965 |
| 16005.010 | Secondary Feeder from Transformer | 115 | LF | 862.12 | 99,144 |
| 16005.012 | 4" Conduit for Tel/CATV/FA/Spare | 3,040 | LF | 4.40 | 13,376 |
| 16005.014 | 4" Conduit for New Ballfield Circuit (Conduit Only, No Spare, No Conductor) | 850 | LF | 4.40 | 3,740 |
| 16005.016 | Extend Scoreboard Circuit | 325 | LF | 6.40 | 2,080 |
| 16005.020 | Spare Conduits (4") to Tennis Courts and Comm. Garden | 1,000 | LF | 4.40 | 4,400 |
| 16005.300 | Relocate Overhead Conductors Underground ($100/LF) | 1 | LS | 22,500.00 | 22,500 |
| 16008.098 | Site Lighting Circuitry (Conduit, Wire, Pull Boxes) | 7,700 | LF | 11.20 | 86,240 |
| 16008.250 | Exterior 18ft Pole Fixture - Custom LED, Single Area (SL1/4HS, SL1/4H, SL1/5H) | 29 | EA | 2,500.00 | 72,500 |
| 16008.251 | Exterior 18ft Pole Fixture - Custom LED, Twin Area (SL2/4H, SL2/5H) | 14 | EA | 2,800.00 | 39,200 |
| 16008.252 | Exterior 12ft Pole Fixture - Custom LED, Single Area (SL1/2L, SL1/4L) | 22 | EA | 2,300.00 | 50,600 |
| 16008.255 | SL4 Exterior Wall Mount - LED | 84 | EA | 555.00 | 46,620 |
| | **** Total SITE ELECTRICAL** | | | | **498,365** |
| | **GENERATORS & ACCESSORIES** | | | | |
| 16020.210 | 350 kW, 438kVA NG Emergency Generator w/Sound Attenuated Enclosure (Cummins) | 1 | EA | 174,446.07 | 174,446 |
| 16020.210 | 80 kW, 100kVA NG Emergency Generator w/Sound Attenuated Enclosure (Cummins) | 1 | EA | 31,755.00 | 31,755 |
| 16020.212 | Emergency Power Equipment and Distribution | 310,380 | SF | 0.50 | 155,190 |
| 16020.214 | Emergency Generator - Testing | 1 | LS | 1,000.00 | 1,000 |
| 16020.214 | Emergency Generator - Testing | 1 | LS | 4,000.00 | 4,000 |
| | **** Total GENERATORS & ACCESSORIES** | | | | **366,391** |
| | **SWITCHGEAR** | | | | |
| 16030.000 | Switchgear / Panelboard - Equipment Only | 1 | LS | 147,000.00 | 147,000 |
| 16030.000 | Switchgear / Panelboard - Equipment Only | 1 | LS | 588,000.00 | 588,000 |
| 16030.090 | Panel 100A | 41 | EA | 244.44 | 10,022 |
| 16030.092 | Panel 225A | 20 | EA | 293.33 | 5,867 |
| 16030.094 | Panel 400A | 28 | EA | 661.65 | 18,526 |
| 16030.096 | Panel 500A | 1 | EA | 770.00 | 770 |
| 16030.097 | Panel 600A | 2 | EA | 880.00 | 1,760 |
| 16030.099 | Panel 800A | 7 | EA | 988.76 | 6,921 |
| 16030.108 | Transformer Dry Type, Three Phase, 45kVA, T-5 | 12 | EA | 1,100.00 | 13,200 |
| 16030.110 | Transformer Dry Type, Three Phase, 75kVA, T-6 | 9 | EA | 1,194.29 | 10,749 |
| 16030.112 | Transformer Dry Type, Three Phase, 112.5kVA | 2 | EA | 4,182.78 | 8,366 |
| 16030.114 | Transformer Dry Type, Three Phase, 150kVA | 1 | EA | 5,137.65 | 5,138 |
| 16030.120 | Transformer Dry Type, Three Phase, 225kVA, T-9 | 5 | EA | 1,880.00 | 9,400 |
| 16030.222 | ATS-LS - 150A (Included w/Generator Price) | | EA | 3,591.67 | |
| 16030.226 | ATS-AS 260A, 3P (Included w/Generator Price) | | EA | 5,190.00 | |
| 16030.232 | ATS-OS - 800A, 3P (Included w/Generator Price) | | EA | 11,200.00 | |

Job #: 15027
Project Size: 310380 SF
Detail - With Taxes and Insurance

Estimator: KN, JB, MT, AM
Group 1: Major ItemCode Groups
Group 2: Minor ItemCode Groups

| Item Code | Description | Quantity | UM | Total UnitCost | Total Cost |
|---|---|---|---|---|---|
| 16030.324 | Switchboard, Panels, Circuit Breakers 1600A 480V 3 Phase | 1 | EA | 6,285.71 | 6,286 |
| 16030.326 | Switchboard, Panels, Circuit Breakers 4000A 480V 3 Phase | 1 | EA | 13,285.71 | 13,286 |
| **** Total SWITCHGEAR** | | | | | **845,290** |
| **POWER DISTRIBUTION** | | | | | |
| 16040.060 | Grounding/Bonding | 1 | LS | 10,000.00 | 10,000 |
| 16040.200 | 15 KVA UPS | 1 | EA | 15,000.00 | 15,000 |
| 16040.202 | 30 KVA UPS | 3 | EA | 25,000.00 | 75,000 |
| 16040.470 | MI Cable - 4 Conductor, #6 | 1,770 | LF | 24.65 | 43,631 |
| 16040.472 | MI Cable Termination Kits | 16 | EA | 105.00 | 1,680 |
| 16040.480 | T-5 Primary - AS | 15 | EA | 15.32 | 230 |
| 16040.481 | T-5 Secondary - AS | 15 | LF | 37.54 | 563 |
| 16040.482 | T-5 (K13) Primary - UG | 30 | LF | 11.96 | 359 |
| 16040.483 | T-5 (K13) Secondary | 18 | LF | 43.89 | 790 |
| 16040.484 | T-5 Primary | 540 | LF | 15.32 | 8,273 |
| 16040.485 | T-5 Primary - UG | 1,450 | LF | 11.96 | 17,342 |
| 16040.486 | T-5 Secondary | 145 | LF | 37.54 | 5,443 |
| 16040.487 | T-6 (K13) Primary - UG | 700 | LF | 16.16 | 11,312 |
| 16040.488 | T-6 (K13) Secondary | 40 | LF | 76.92 | 3,077 |
| 16040.489 | T-6 Primary | 245 | LF | 20.70 | 5,072 |
| 16040.490 | T-6 Secondary | 80 | LF | 60.56 | 4,845 |
| 16040.491 | T-7 Primary | 230 | LF | 22.17 | 5,099 |
| 16040.492 | T-7 Secondary | 32 | LF | 85.83 | 2,747 |
| 16040.493 | T-8 (K13) Primary | 28 | LF | 54.20 | 1,518 |
| 16040.494 | T-8 (K13) Secondary | 15 | LF | 142.50 | 2,138 |
| 16040.495 | T-9 Primary | 30 | LF | 65.01 | 1,950 |
| 16040.496 | T-9 Secondary | 85 | LF | 208.00 | 17,680 |
| 16040.497 | T-9 Primary - UG | 840 | LF | 52.30 | 43,932 |
| 16040.498 | T-9 (K13) Primary | 55 | LF | 65.01 | 3,576 |
| 16040.499 | T-9 (K13) Secondary | 46 | LF | 249.00 | 11,454 |
| 16040.500 | ATS-LS Feeder, From Gen. | 130 | LF | 20.75 | 2,698 |
| 16040.502 | ATS-OS Feeder, From Gen. | 130 | LF | 32.37 | 4,208 |
| 16040.506 | Emergency Lighting Panel Feeder | 16 | LF | 20.75 | 332 |
| 16040.508 | 60A Feeder | 16 | LF | 13.25 | 212 |
| 16040.510 | 100A Feeder | 3,152 | LF | 27.00 | 85,104 |
| 16040.510 | 100A Feeder - UG | 665 | LF | 22.00 | 14,630 |
| 16040.512 | 150A Feeder | 925 | LF | 37.75 | 34,919 |
| 16040.512 | 150A Feeder - UG | 285 | LF | 33.75 | 9,619 |
| 16040.512 | Animal Science Generator Feeder - UG | 135 | LF | 24.85 | 3,355 |
| 16040.514 | 200A Feeder | 85 | LF | 47.71 | 4,056 |
| 16040.516 | 225A Feeder | 45 | LF | 54.33 | 2,445 |
| 16040.516 | Animal Science Feeder - UG (from MSBGC) | 600 | LF | 59.30 | 35,580 |
| 16040.518 | 250A Feeder | 13 | LF | 62.33 | 810 |
| 16040.522 | 400A Feeder | 2,210 | LF | 82.43 | 182,168 |
| 16040.524 | 600A Feeder | 200 | LF | 124.67 | 24,933 |
| 16040.524 | 600A Feeder - UG | 265 | LF | 114.67 | 30,387 |
| 16040.526 | 800A Feeder | 50 | LF | 166.89 | 8,345 |
| 16040.530 | 1600A Feeder | 315 | LF | 315.00 | 99,225 |
| **** Total POWER DISTRIBUTION** | | | | | **835,733** |
| **BRANCH** | | | | | |
| 16050.102 | Device Box | 2,194 | EA | 29.75 | 65,272 |
| 16050.102 | Junction Box | 622 | EA | 29.75 | 18,505 |
| 16050.102 | Power and Branch Circuitry | 310,380 | SF | 2.50 | 775,950 |
| 16050.104 | Floor Box w/Power and Data | 64 | EA | 107.50 | 6,880 |
| 16050.106 | Quad Receptacle | 435 | EA | 40.00 | 17,400 |
| 16050.108 | Duplex / Duplex GFI / Weatherproof | 1,571 | EA | 30.20 | 47,444 |
| 16050.110 | EPO | 7 | EA | 111.40 | 780 |

Job #: 15027
Project Size: 310380 SF
Detail - With Taxes and Insurance

Estimator: KN, JB, MT, AM
Group 1: Major ItemCode Groups
Group 2: Minor ItemCode Groups

| Item Code | Description | Quantity | UM | Total UnitCost | Total Cost |
|---|---|---|---|---|---|
| 16050.132 | Device Plate, Plastic, 2-Gang | 1,571 | EA | 9.10 | 14,299 |
| 16050.136 | Device Plate, Plastic, 4-Gang | 435 | EA | 18.90 | 8,220 |
| 16060.414 | RTU, MUA, ERV, HVU Feeder | 25 | EA | 2,706.00 | 67,650 |
| 16060.416 | Boiler Feeder | 3 | EA | 1,201.75 | 3,605 |
| 16060.416 | Boiler Feeder | 3 | EA | 1,401.75 | 4,205 |
| 16060.418 | Pump Feeder | 3 | EA | 1,315.75 | 3,947 |
| 16060.418 | Pump Feeder | 3 | EA | 1,965.75 | 5,897 |
| 16060.420 | Chiller Feeder | 1 | EA | 8,336.00 | 8,336 |
| 16061.000 | Wire / Install BB Hoop Motor and Control | 8 | EA | 5,000.00 | 40,000 |
| 16061.001 | Wire / Install Scoreboard & Jacks | 2 | EA | 3,500.00 | 7,000 |
| 16061.003 | Misc Devices in Gym/Auditorium | 9 | EA | 1,500.00 | 13,500 |
| 16061.005 | Equipment Control Devices | 11 | EA | 1,500.00 | 16,500 |
| **** Total BRANCH** | | | | | **1,125,390** |
| **LIGHTING** | | | | | |
| 16080.000 | LV Chair Lighting in Auditorium | 1 | LS | 10,000.00 | 10,000 |
| 16080.202 | EL Fixture - 4ft Linear LED | 1 | EA | 281.25 | 281 |
| 16080.206 | LP4 Fixture - 4ft LED Direct Pendant | 21 | EA | 281.25 | 5,906 |
| 16080.207 | LPG Fixture - High Bay LED | 81 | EA | 422.50 | 34,223 |
| 16080.208 | LP8 Fixture - 8ft LED Direct Pendant | 461 | EA | 555.00 | 255,855 |
| 16080.210 | LPD1 Fixture - Round LED Pendant | 13 | EA | 177.50 | 2,308 |
| 16080.211 | LPD2 Fixture - Round LED Pendant | 20 | EA | 177.50 | 3,550 |
| 16080.212 | LPD3 Fixture - Round LED Pendant | 12 | EA | 177.50 | 2,130 |
| 16080.213 | LPD4 Fixture - LED Ring Pendant | 22 | EA | 281.25 | 6,188 |
| 16080.214 | LR4 Fixture - 4ft LED Recessed | 3 | EA | 280.00 | 840 |
| 16080.215 | LR8 Fixture - 8ft LED Recessed | 84 | EA | 368.75 | 30,975 |
| 16080.216 | LR14 Fixture - 1ftx4ft LED Recessed | 310 | EA | 255.00 | 79,050 |
| 16080.217 | LR22 Fixture - 2ftx2ft LED Recessed | 27 | EA | 255.00 | 6,885 |
| 16080.218 | LR24 Fixture - 2ftx4ft LED Recessed | 277 | EA | 298.75 | 82,754 |
| 16080.219 | IU Fixture (Darkroom In Use) | 1 | EA | 291.25 | 291 |
| 16080.222 | LRD5 Fixture - 5ft Round LED Fixture | 4 | EA | 449.50 | 1,798 |
| 16080.223 | LRK Fixture - 2ftx4ft LED Recessed (Outdoor) | 53 | EA | 318.75 | 16,894 |
| 16080.226 | LS2 Fixture - 2ft LED Linear | 1 | EA | 216.25 | 216 |
| 16080.227 | LS4 Fixture - 4ft LED Linear | 28 | EA | 241.25 | 6,755 |
| 16080.228 | LS8 Fixture - 8ft LED Linear | 103 | EA | 305.00 | 31,415 |
| 16080.229 | LSV4 Fixture - 4ft LED Linear Vandal Proof | 41 | EA | 291.25 | 11,941 |
| 16080.230 | LSV8 Fixture - 8ft LED Linear Vandal Proof | 79 | EA | 355.00 | 28,045 |
| 16080.231 | LW4 Fixture - 4ftx4ft LED Linear Direct/Indirect | 86 | EA | 305.00 | 26,230 |
| 16080.233 | LWS Fixture - Continuous LED Slot | 4 | EA | 295.00 | 1,180 |
| 16080.234 | PC1 Fixture - Round LED Pendant | 36 | EA | 151.25 | 5,445 |
| 16080.235 | PC2 Fixture - Round LED Pendant | 25 | EA | 151.25 | 3,781 |
| 16080.236 | RC1 Fixture - 6in LED Round Downlight | 158 | EA | 141.25 | 22,318 |
| 16080.238 | RC2 Fixture - 4in LED Round Downlight | 4 | EA | 125.75 | 503 |
| 16080.240 | RSH Fixture - 6" Downlight | 12 | EA | 141.25 | 1,695 |
| 16080.241 | RS Fixture - Exit Lamps, Double Faced, LED | 46 | EA | 136.06 | 6,259 |
| 16080.242 | LRS Fixture - 4in LED Linear Recessed | 58 | EA | 281.25 | 16,313 |
| 16080.243 | S1 Fixture - 16" Cylinder LED Downlight | 12 | EA | 393.75 | 4,725 |
| 16080.244 | SC1 Fixture - 24" Dia., LED Luminous Ring | 16 | EA | 443.75 | 7,100 |
| 16080.300 | Occupancy Sensor | 340 | EA | 110.00 | 37,400 |
| 16080.301 | Photo Sensor | 117 | EA | 110.00 | 12,870 |
| 16081.100 | Lighting Circuitry | 310,380 | SF | 2.00 | 620,760 |
| 16081.102 | Lighting Controls | 310,380 | SF | 1.25 | 387,975 |
| 16081.104 | Lighting Controls & Panels - Testing | 1 | LS | 500.00 | 500 |
| 16081.104 | Lighting Controls & Panels - Testing | 1 | LS | 1,000.00 | 1,000 |
| 16081.104 | Lighting Controls & Panels - Testing | 1 | LS | 25,000.00 | 25,000 |
| 16081.150 | Stage Lights / Sound System / Dimmer Rack ** ALLOWANCE ** | 1 | LS | 375,000.00 | 375,000 |
| **** Total LIGHTING** | | | | | **2,174,352** |
| **COMMUNICATIONS** | | | | | |

Job #: 15027
Project Size: 310380 SF
Detail - With Taxes and Insurance

Estimator: KN, JB, MT, AM
Group 1: Major ItemCode Groups
Group 2: Minor ItemCode Groups

| Item Code | Description | Quantity | UM | Total UnitCost | Total Cost |
|---|---|---|---|---|---|
| 16100.000 | Sound System - Cafeteria | 1 | LS | 20,000.00 | 20,000 |
| 16100.001 | Sound System - Gymnasium | 1 | LS | 20,000.00 | 20,000 |
| 16100.002 | Sound System - Music Room | 1 | LS | 10,000.00 | 10,000 |
| 16100.003 | Bi-Directional Antennae | 1 | LS | 50,000.00 | 50,000 |
| 16100.004 | Area of Refuge Assistance System | 310,380 | SF | 0.15 | 46,557 |
| 16100.101 | EMT 3/4", Tel/Data Drops | 12,092 | LF | 4.46 | 53,925 |
| 16100.102 | Device Box - Tel/Data Drops | 1,145 | EA | 29.75 | 34,064 |
| 16110.000 | Tel/Data Infrastructure ** ALLOWANCE ** | 1 | LS | 40,000.00 | 40,000 |
| 16110.024 | Voice/Data Outlet, Single Port, SS Wall Plate | 1,343 | EA | 32.21 | 43,264 |
| 16110.044 | CAT VI Cable - Tel/Data | 1,343 | CLF | 86.86 | 116,649 |
| 16110.050 | Cable Tray, Server Room / IDF Closets | 90 | LF | 30.48 | 2,743 |
| 16110.052 | J-Hooks, 4" (Every 4 ft) - Tel/Data | 2,167 | EA | 42.57 | 92,255 |
| 16180.000 | Master Clock Station and Wiring | 310,380 | SF | 0.30 | 93,114 |
| 16180.002 | Clock | 206 | EA | 105.00 | 21,630 |
| 16180.004 | Intercom Stations and Wiring | 310,380 | SF | 0.85 | 263,823 |
| 16180.006 | Speaker | 306 | EA | 155.00 | 47,430 |
| 16180.100 | Communications - Testing | 1 | LS | 20,000.00 | 20,000 |
| **** Total COMMUNICATIONS** | | | | | **975,454** |
| **SECURITY** | | | | | |
| 16200.000 | Security System - Head End Equipment | 1 | LS | 55,000.00 | 55,000 |
| 16200.002 | Fixed Interior CCTV Cameras (Changed from $3,000 per Consultant 25APR16) | 129 | EA | 2,000.00 | 258,000 |
| 16200.003 | Reduce interior camera count based on review with school. | 1 | LS | -50,000.00 | -50,000 |
| 16200.004 | Pan-Tilt-Zoom Exterior CCTV Cameras (Changed from $5,000 per Consultant 25APR16) | 31 | EA | 3,500.00 | 108,500 |
| 16200.101 | Card Readers - Swipes/Wires | 59 | EA | 1,700.00 | 100,300 |
| 16200.142 | Motion Sensor | 108 | EA | 123.25 | 13,311 |
| 16200.150 | Panic Button | 6 | EA | 180.00 | 1,080 |
| 16200.300 | Intrusion Alarm Keypad | 4 | EA | 491.25 | 1,965 |
| 16200.400 | Request-to-Exit Panic Hardware (In Division 8) | 21 | EA | | |
| **** Total SECURITY** | | | | | **488,156** |
| **FIRE ALARM** | | | | | |
| 16300.104 | Fire Alarm Testing | 2 | LS | 750.00 | 1,500 |
| 16300.104 | Fire Alarm Testing | 1 | LS | 7,500.00 | 7,500 |
| 16300.105 | Fire Alarm Control Panel (Addressable) | 1 | EA | 10,500.00 | 10,500 |
| 16300.107 | Fire Alarm Terminal Cabinet | 10 | EA | 1,200.00 | 12,000 |
| 16300.120 | Remote Annuciator | 4 | EA | 567.00 | 2,268 |
| 16300.132 | Manual Pull Stations | 30 | EA | 108.50 | 3,255 |
| 16300.134 | Smoke/Heat Detectors | 192 | EA | 178.00 | 34,176 |
| 16300.138 | CO Detectors / Monitors | 12 | EA | 212.50 | 2,550 |
| 16300.174 | FA Speakers | 282 | EA | 130.25 | 36,731 |
| 16300.178 | Strobes | 54 | EA | 165.50 | 8,937 |
| 16300.180 | Horn/Strobes | 32 | EA | 231.50 | 7,408 |
| 16300.244 | Knox Box | 2 | EA | 405.00 | 810 |
| 16300.248 | Magnetic Door Holder | 34 | EA | 255.00 | 8,670 |
| 16300.300 | Audible / Visual / Detection Loop MC Cable | 284 | CLF | 425.00 | 120,700 |
| 16300.304 | FA Wiring | 51,950 | LF | 0.96 | 49,820 |
| 16300.400 | EMT 3/4" - Audible / Visual / Detection Loop Conduit | 7,080 | LF | 4.46 | 31,574 |
| 16300.402 | EMT 1" - FATC Feeder Conduit | 1,970 | LF | 5.19 | 10,224 |
| **** Total FIRE ALARM** | | | | | **348,623** |
| **MISCELLANEOUS** | | | | | |
| 16400.100 | Commissioning | 1 | LS | 20,000.00 | 20,000 |
| 16400.100 | Commissioning | 1 | LS | 40,000.00 | 40,000 |
| 16400.102 | Firestopping | 1 | LS | 5,000.00 | 5,000 |
| 16400.102 | Firestopping | 1 | LS | 15,000.00 | 15,000 |

Job #: 15027
Project Size: 310380 SF
Detail - With Taxes and Insurance

Estimator: KN, JB, MT, AM
Group 1: Major ItemCode Groups
Group 2: Minor ItemCode Groups

| Item Code | Description | Quantity | UM | Total UnitCost | Total Cost |
|---|---|---|---|---|---|
| 16400.104 | Identification | 1 | LS | 1,500.00 | 1,500 |
| 16400.104 | Identification | 1 | LS | 6,000.00 | 6,000 |
| 16400.106 | Seismic Restraint | 1 | LS | 2,500.00 | 2,500 |
| 16400.106 | Seismic Restraint | 1 | LS | 10,000.00 | 10,000 |
| 16400.108 | Fees & Permits ($15/$1000) - Waived | 2 | LS | | |
| **** Total MISCELLANEOUS** | | | | | **100,000** |
| *** Total 16 - ELECTRICAL** | | | | | **7,757,754** |
| **Total Gross Cost** | | | | | **66,908,293** |

Dover School District - Dover High School & Career Technical Center

**DESIGN DEVELOPMENT ESTIMATE**

**May 24, 2016**

## A - Design Adjustments (These items have been applied to the current estimate)

| Item Number | Title/Description | Total Cost |
|---|---|---|
| A1 | Change granite seat walls to precast | ($42,832) |
| A2 | Adjust curtain wall square footage, target 14,500 SF | ($142,888) |
| A3 | Reduce auditorium wall panels | ($114,490) |
| A4 | Change tongue and groove wood ceiling to accoustical ceiling at front entry | ($54,398) |
| A5 | Adjust projected brick quantity down to 15,000 SF | ($305,563) |
| A6 | Change colored concrete to standard concrete in courtyard | ($36,270) |
| A7 | Change zinc metal roof edge to painted aluminum | ($33,309) |
| A8 | Delete whiteboards in corridors | ($21,055) |
| A9 | Simplify Town Square elevations/openings and reduce glass railings | ($14,334) |
| A10 | Change glass handrail at learning common areas to half height drywall with wood cap. | ($20,650) |
| A11 | Change pendant light fixtures to lay-in fixtures in offices, small group rooms, science prep rooms | ($13,445) |
| A12 | Combustion air for boilers (6x) from sidewall louver in PVC duct | ($9,649) |
| A13 | Entry canopy modifications | ($214,162) |
| A14 | Changed solid surface to plastic laminate countertops | ($42,832) |
| A15 | Maintain wainscot wall tile at 35,000 SF | ($243,959) |
| A16 | Change interior curtain wall to borrowed lights in drywall partition | ($57,823) |
| A17 | SW&V & storm drain piping changed from Cast Iron to PVC | ($171,202) |
| A18 | Remove construction wood benches (to be by owner) | ($20,792) |
| A19 | Remove electrical training wood framed system (to be by owner) | ($8,343) |
| A20 | Add mat movers | $32,124 |
| A21 | Change gypsum wall board soffits to ACT at classrooms | ($79,069) |
| | | |
| | Total Design Adjustments | **($1,614,941)** |

## B - Value Engineering Items

| Item Number | Title/Description | Total Cost | Take VE "YES" |
|---|---|---|---|
| B1 | Riding Ring to be funded through FFE Budget | ($115,753) | YES |
| B2 | Remove surface mounted paper towel holder, recessed waste receptacle, liquid soap dispenser and elecrtic hand dryers | ($32,420) | YES |
| B3 | Change acoustical clouds in band / music room to 50% C1A ceiling and 50% Pyramidal ceiling | ($43,218) | YES |
| B4 | Change concrete pavers at entrances to sand blasted concrete | ($37,319) | YES |
| B5 | Change acoustic roof equipment screens to a visual screen | ($26,770) | YES |
| B6 | Change 1,600 SF of auditorium wood wall paneling to fizsfelt covered wall panel | ($13,706) | NO |
| B7 | Change linoleum to VCT | ($184,411) | NO |
| B8 | Remove remaining wall tile and include impact resistant drywall and epoxy paint. | ($259,723) | NO |
| B9 | Change rubber stair treads & landings to sealed concrete and paint risers. | ($63,973) | YES |
| B10 | Change granite curbing to concrete curbs within parking areas at straight sections only. | ($18,952) | NO |
| B11 | Eliminated lightning protection | ($32,124) | YES |
| B12 | Change 4" Asphalt to 3-1/2" at fire loop only | ($5,277) | YES |
| B13 | Reduce interior camera count by based on review with School | ($50,000) | YES |
| B14 | Delete ceilings in art rooms, storage rooms and janitor closets | ($5,409) | YES |
| B15 | Change ceilings in locker & team rooms from gypsum to ACT | ($11,440) | YES |
| B16 | Change wood cloud ceiling from wood to gypsum board at auditorium | ($89,411) | YES |
| B17 | Reduce plantings around building and courtyard by 10% (Excluding Tree Material) | ($18,272) | NO |
| B18 | Fundraise for all tree material costs excluding trees required at parking areas noted in VE Item B8 | ($90,524) | NO |
| B18.1 | Fundraise to purchase trees (material only) located in school parking lot (71 Trees) | ($44,022) | NO |
| B19 | Change 7,800 SF of standard brick veneer to glazed CMU | ($50,113) | YES |
| B20 | Change gym brick veneer and metal panel to glazed CMU | ($48,186) | YES |
| B21 | Change wall tile to alternate product (to be accepted by HMFH) | ($8,750) | NO |
| B22 | Change visual roof equipment screens to architectural louver product (Must select B6) | ($14,691) | NO |
| B23 | Reduce caliper from 4.5" to 3" at Parking Area & Bus Loop | ($10,119) | YES |
| B24 | Fundraise for trees | ($30,000) | NO |
| B25 | Delete ceilings in Team Rooms | ($8,000) | NO |
| B26 | Remove tile wainscot in corridors to Band and Team Rooms; replace with impact resistant board & epoxy paint | ($15,000) | NO |
| B27 | Add steel for photovoltaics | $70,214 | YES |
| B28 | Adjust trees per 02 Landscape 100% DD.pdf | ($132,832) | YES |
| B29 | Add Courtyard trees | $19,274 | YES |
| B30 | Add Trees from Dunham Road to Auto Tech Building along Alumni Drive | $18,846 | YES |
| **Potential Value Engineering Costs to be Accepted** | | **($1,352,080)** | **Total VE** |

CONSTRUCTION

# KHS: SCOPE OF WORK CLARIFICATIONS

Division 1 – General Conditions

1.01 The scope of work consists of a newly constructed three story high school building totaling 301,484 SF along with the Animal Science Building / Barn at 8,896 SF. The total project gross square footage is 310,380.

1.02 The following allowances are included in the estimate:

| | | |
|---|---|---|
| A. | Asbestos Abatement – Gym & Auditorium | $300,000 |
| B. | Asbestos Abatement – High School | $1,000,000 |
| C. | Food Service Equipment – High School Only | $533,715 |
| D. | Kitchen Appliance | $20,000 |
| E. | Auditorium Line Set and Shell | $175,000 |
| F. | Auditorium Stage Lights, Sound System and Dimmer Rack | $375,000 |

1.03 This estimate is based on a 38-month construction schedule.

1.04 Builder's Risk insurance is included, loss of use is excluded.

1.05 A performance and payment bond has been included.

1.06 Temporary heat fuel to be provided by Owner.

1.07 Consumption costs for electrical energy and water are to be provided by Owner.

1.08 Our Design Development estimate includes a Construction Manager's estimating contingency.

1.09 The following items are excluded:

A. Sales tax
B. Third-party commissioning for MEP systems, automation controls and building
C. Owner's protective insurance
D. Impact fees at the Federal, State & Local Level
E. All permits apart from trade-specific permits
F. Design Fees
G. Owner contingency
H. Design contingency
I. Escalation (Except as noted)
J. Renting costs for new modular classrooms
K. Preconstruction services are included under a separate contract

Division 2 – Sitework

2.01 Site demolition:

- Includes:
  A. Removal of existing waterline
  B. Removal of existing storm water piping
  C. Removal of asphalt paving, walkways & concrete curbing
- Excludes:
  A. Removal of hazardous material
  B. Removal of utilities beyond the limits of school property

2.02 Mass demolition:

- Includes:
  A. Includes the complete demolition of existing 270,000 SF high school building
  B. Removal of existing entrance canopy
- Excludes:
  A. Excludes seismic monitoring

2.03 Selective demolition:

- Includes:
  A. Removal and salvage of existing lockers
  B. An allowance of $300,000 for asbestos abatement in the gym and auditorium
  C. An allowance of $1,000,000 for asbestos abatement in high school excluding gym and auditorium

2.04 Preliminary sitework:

- Includes:
  A. Site clearing
  B. Stripping of topsoil to a depth of 4" and stockpile for reuse on site
  C. Laydown area
  D. Construction entrances
  E. Erosion control
  F. Temporary site access, fencing and dust control

2.05 Earthwork:

- Includes:
  A. Clearing and grubbing
  B. Site excavation with infill at existing classroom structure after demolition is included
  C. Stockpiling of topsoil for reuse on site as required, if suitable
  D. Removal of excess topsoil and/or reuse on site as site fill material
  E. Stockpiling and seeding of excess topsoil on site for the Owner's use
  F. Installation, maintenance and removal of erosion control
  G. Installation, maintenance and removal of temporary access road(s)

H. Inlet protection
- Excludes:
  A. Drilling/blasting and rock removal
  B. Unsuitable soil removal and replacement is not included

2.06 Dewatering:
- Includes:
  A. Open pumping for rain events and minor ground water
- Excludes:
  A. Major dewatering

2.07 Earth retention is not anticipated.

2.08 Aggregate piers have been included per "Figure 4 of 5883 Updated Foundation Engineering Recommendations 032116.pdf"

2.09 Site Utilities:
- Includes:
  A. Underdrain, storm, water, sanitary utilities per documents
  B. Underground gas piping per documents
  C. Primary and secondary electrical per documents
- Excludes:
  A. Further modification or replacement of storm lines under Fletcher Street
  B. Concrete encasement
  C. Directional boring
  D. Rock removal

2.10 Roads and walks:
- Includes:
  A. Site paving per documents (Excluding Alumni Drive scope of work)
  B. Standard non-colored concrete paving in lieu of colored concrete in courtyard (See VE Log – A6)
  C. Concrete pavers at entrances to be sandblasted concrete in lieu of pavers (See VE Log – B4).
  D. Fire loop has asphalt has been changed from 4" to 3-1/2" (See VE Log – B12).
  E. Pavement striping within interior and exterior parking areas.
  F. Roadway and parking signage as described in the estimate.
  G. Temporary asphalt walkways.
- Excludes:
  A. Asphalt paving at Alumni Drive

2.11 Site improvements:

- Include:
    - A. Spreading topsoil from stockpile to a depth of 4″
    - B. Seeding of new areas
    - C. Temporary seeding and repair of areas during construction
    - D. Chain link fencing
    - E. All plantings per documents with the exception of trees.
    - F. Trees have been included at parking lot and bus loop, at Alumni drive and at courtyard. All remaining trees on the Design Development drawings can be added via add alternate (See VE Log – B28, B29 & B30).
    - G. All trees in base estimate to be 3″ Caliper (See VE Log – B23).
    - H. Redi-Rock walls per documents.
    - I. Precast concrete seat walls have been included in lieu of granite (See VE Log - A1).
    - J. Four tennis courts.
    - K. One Soccer Field.
    - L. Two Baseball Fields.
    - M. New athletic turf field with drainage system.
- Exclude:
    - A. Sod
    - B. Site signage
    - C. Track Reconstruction
    - D. Track Equipment
    - E. Irrigation at softball field
    - F. Riding ring has not been included in Base Estimate, this will be covered under FFE budget.

<u>Division 3 – Concrete</u>

3.01 Concrete:

- Includes:
    - A. Concrete foundations per structural drawings.
    - B. Concrete slab on grade over 15 Mil Stego Wrap per documents.
    - C. Concrete slab on deck per structural drawings
    - D. Animal science building to include 8″x16″ continuous footings with 8″ x 4′ frost walls.
- Excludes:
    - A. Form Liner

## Division 4 – Masonry

4.01 Masonry:

- Includes:
  A. 15,000 SF of brick veneer with projecting pattern (See VE Log – A5).
  B. 67,016 SF of standard brick veneer.
  C. 12,483 SF of Glazed CMU (See VE Log - B19 & B20).
  D. All CMU partitions to be included per documents.
  E. CMU elevator shafts per documents.

## Division 5 – Metals

5.01 Structural steel:

- Includes:
  A. Tonnage per Foley Buhl Roberts Structural Narrative referenced on List of Documents.
  B. Additional steel tonnage to reinforce entire roof structure for future photovoltaics (See VE Log – B27).

5.02 Miscellaneous metals:

- Includes:
  A. Metal pan stairs and railings
  B. Stainless steel site railings
  C. Galvanized loose lintels not tied to structural steel framing
  D. Miscellaneous connections, fasteners, welding, bolts, and plates
  E. Steel framed catwalk with ladder access at auditorium
  F. Elevator pit ladders and sump pit gratings
  G. Site bollards
  H. Once aluminum column enclosure per documents.
  I. Glass handrails at town square per revised drawings referenced on List of Documents (See VE Log – A9).

## Division 6 – Carpentry

6.01 Rough carpentry:

- Includes:
  A. Conventional wood framed Animal Science Building and Barn.
  B. Fire treated wood blocking in gypsum board assemblies
  C. Fire treated wood blocking for punch windows
  D. Fire treated wood blocking within flat roof assemblies
- Excludes:
  A. Framing for riding ring

B. Construction wood benches (See VE Log – A18)
C. Electrical training wood framed structure (See VE Log – A19)

6.02 Finish carpentry and millwork:

- Includes:
  A. Non-laboratory casework per documents
  B. Mail room cabinets & cubbies
  C. Library, Guidance, Dean and Admin Desks
  D. Solid surface window sills
  E. Solids surface sills at borrowed lights per documents
  F. Display cases as outlined in estimate
  G. Wood veneer platform shown on A8.4
  H. Solid surface locker benches
  I. Wood base per drawings
  J. 6,800 SF of Wood Acoustic Panels in Auditorium (See VE Log – A3)
  K. FRP wall covering at Janitorial Rooms

Division 7 – Moisture and Thermal Protection

7.01 Waterproofing/dampproofing:

- Includes:
  A. Dampproofing of steel columns below slabs
  B. Crystalline waterproofing at elevator pits and orchestra pit.
  C. Fluid applied waterproofing against auditorium foundation wall per structural drawings
  D. Caulking and sealants as required

7.02 Insulation:

- Includes:
  A. 2″ rigid insulation at frost walls
  B. 2′ section of 2″ rigid insulation at perimeter of slab on grade
  C. 3-1/2″ Mineral wool insulation at exterior walls
  D. Membrane applied air infiltration barrier at outer side of all new exterior walls with poly vapor barrier on inner side
  E. 18″ cellulose in ceilings of heating space in animal science building
  F. 6″ Batt insulation in walls of animal science barn

7.03 Fireproofing:

- Includes:
  A. Cementitious fireproofing at steel beams, columns and roof deck only at construction type 1B areas per structural narrative.
  B. Intumescent fireproofing at gym steel and select columns per documents.
- Excludes:

A. Fireproofing not mentioned above.

7.04 Roofing:

- Includes:
  A. Metal roofing at animal science building.
  B. EPDM membrane roof with painted aluminum break metal coping (See VE Log – A7).
  C. Entrance structure to include EPDM roofing in lieu of copper standing seam roof (See VE Log – A13).
  D. Roof walkway pads.
  E. Roof Scuppers.
  F. All rooftop screens are to be visual only (See VE Log – B5).
  G. Skylights at gym.
  H. Roof expansion joints
- Excludes:
  A. Green roof
  B. Roof tie-offs
  C. Acoustic roof screens

7.05 Siding:

- Includes:
  I. Composite metal wall panels per elevations except gym façade which has been changed to glazed CMU.
  J. Exposed fastener corrugated metal siding at Animal science building/barn.
  K. Trespa siding system as revised front entrance only.
- Excludes:
  A. Copper Siding

7.06 Expansion Joints:

- Include:
  A. Caulk exterior wall control joints
  B. Expansion joints in floor
  C. Fire rated expansion joints at fire walls

Division 8 – Doors and Windows

8.01 Exterior doors:

- Include:
  A. Exterior doors per documents
  B. Sliding wood doors at Animal Science Building / Barn
  C. Card readers at all public entrance doors
  D. Nanawall sliding door as noted in estimate.

8.02 Special doors:

- Includes:
  - A. Insulated overhead doors as noted in estimate
  - B. Coiling windows as noted in estimate
  - C. Ceiling access hatches at all GWB ceilings as required

8.03 Exterior windows:

- Include:
  - A. Aluminum/vinyl clad windows at the barn.
  - B. Aluminum punched windows per documents.
  - C. 14,500 SF of curtain wall (See VE Log – A2).
  - D. Sky lights as defined in estimate.
- Exclude:
  - A. Heat Mirror.
  - B. Triple glazed curtain wall.

8.04 Interior doors:

- Include:
  - A. Hollow metal doors and frames at storage and mechanical areas.
  - B. Solid-core wood veneer doors with hollow metal frames at all other locations.
  - C. Interior borrowed sidelights per documents.
  - D. Panic hardware as required, including electronic lockdown hardware in corridors.
  - E. Nanawall sliding door as noted in estimate.

8.05 Interior windows:

- Include:
  - A. Interior borrowed lights per documents.
  - B. Additional borrowed lights in lieu of interior curtain wall shown on documents (See VE Log – A16).
- Exclude:
  - A. Interior Curtain Wall

Division 9 – Finishes

9.01 Partitions:

- Include:
  - A. Gypsum wallboard and metal studs at interior partitions, framed to bottom of deck
  - B. Densglass sheathing, gypsum wallboard, and metal studs at exterior partitions
  - C. Furred gypsum partitions over masonry partitions as required
  - D. 5/8" densglass at new exterior partitions
  - E. Abuse resistant GWB at corridors

F. Half height GWB partitions in lieu of glass handrail at learning common areas (See VE Log – A10).

9.02 Flooring:

- All flooring to be included per floor finish plans except for the following:
  - A. Stair treads and landings to be sealed concrete with painted risers in lieu of rubber (See VE Log – B9).
  - B. Moisture mitigation is only included at carpet areas.

9.03 Wall finishes:

- Include:
  - A. 2,825 SF of Ecophone acoustic panels in auditorium.
  - B. 2" tectum wall panels in auditorium and band/chorus.
  - C. 35,000 SF of wall tile has been included in the estimate (See VE Log A15).
  - D. Painted gypsum board in remainder of areas.
- Exclude:
  - A. Rigid insulation backing and wood framing at acoustic panels.

9.04 Ceiling finishes:

- All flooring to be included per floor finish plans except for the following:
  - A. Gypsum board soffits are not included within classrooms (See VE Log – A21)
  - B. No ceilings are to be included in art rooms, storage rooms and janitor closets (See VE Log – B14).
  - C. Acoustical Tile has been included at front entry in lieu of wood tongue and groove ceiling (See VE Log – A4).
  - D. Band/Music room is 50% C1A ceiling system and 50% pyramidal ceiling in lieu of acoustical clouds (See VE Log - B3).
  - E. Ceilings in locker and teams rooms to be ACT (See VE Log B15).
  - F. Auditorium to include GWB cloud ceiling (See VE Log B16)

- Exclude:
  - A. Ceilings/finish in mechanical, electrical and custodial rooms.

<u>Division 10 – Specialties</u>

10.01 Specialties:

- Include:
  - A. Phenolic toilet compartments and urinal screens.
  - B. Toilet room grab bars and mirrors.
  - C. Fire extinguishers and cabinets.
  - D. Existing high school lockers to be painted and reused at corridors in new construction.
  - E. New lockers to be included at locker room areas.

F. ADA Signage
G. One flag pole
H. Marker boards per plan, except for marker boards in corridors (See VE Log – A8).
I. Chain link partitions as shown on drawings

- Exclude:
  A. Smart boards
  B. Toilet paper dispensers, surface mount waste receptacle, soap dispenser and hand dryers at restrooms (See VE Log – B2).
  C. Marker boards in corridors.

Division 11 – Equipment

11.01 Food service equipment:
- Includes:
  A. Food service allowance of $533,715 at High School
  B. Walk-in cooler and freezer in new cafeteria is included in the Food service allowance
  C. Kitchen appliance allowance of $20,000.
- Excludes:
  D. CTC Kitchen Equipment

11.02 Athletic equipment:
- Includes:
  A. New gym bleachers per plans.
  B. 7'-4" High wall padding in gym.
  C. Gym divider curtain.
  D. Twelve new basketball hoops.
  E. Four volleyball net with floor inserts.
  F. 3 Mat Movers (See VE Log – A20).
  G. Installation of owner provided batting cage
  H. Installation of owner provided climbing wall
- Excludes:
  A. Climbing wall and batting cage material

11.03 Theater and stage equipment:
- Includes:
  A. An allowance of $175,000 for line sets and shell system
  B. 850 Seats at auditorium

11.04 Loading dock equipment:
- Includes:
  C. One dock leveler
  D. Dock bumper

Division 12 – Furnishings

12.01 Window Furnishings:

- Include:
    - A. Manual roller shades at exterior punched windows.
    - B. Mini blinds at borrowed lights in classrooms and offices that adjoin a corridor or another room.

12.02 Lab Casework:

- Includes:
    - A. Lab casework per revised casework drawings (See VE Log – A14).
    - B. "Peninsula counter space" has been figured as epoxy resin tables.
- Excludes:
    - A. Base cabinets under epoxy resin tables.

Division 13 – Special Construction

13.01 Riding ring has been removed and is to be funded through the FFE budget (See VE Log – B1).

Division 14 – Conveying Systems

14.01 Two hydraulic elevators per documents.

Division 15 – Plumbing

15.01 Plumbing system:

- Includes:
    - A. 4" water service for High School plumbing system, from shared 8" water entrance.
    - B. 2" water service for Animal Science plumbing system, from shared 6" water entrance.
    - C. (3) gas-fired, domestic hot water heaters, (2) for High School, (1) for Animal Science.
    - D. Domestic hot and cold water distributed to all plumbing fixtures, copper type L for 2" and smaller, 2-1/2" and larger to be black steel.
    - E. Hot water recirculation.
    - F. Floor drains provided with trap primers.
    - G. Exterior freeze-proof wall hydrants.
    - H. (15) Emergency showers and eyewash fountains (none shown on plans)
    - I. Sanitary waste and vent piping, all schedule 40 PVC per VE log
    - J. Natural gas piping to boilers, domestic water heaters, Kitchen and Culinary equipment, roof top equipment, generators and all science labs.

K. Storm drainage system at HS only (none at Animal Science), all schedule 40 PVC per VE log
L. Air compressor systems and outlets for CTC areas.
M. Acid neutralization system
N. (10) showers.
O. Rough-in for Kitchen equipment.
P. Plumbing fixtures, rough-in and connections for water closets, urinals, lavatories, sinks, laboratory sinks, utility sinks, mop sink basins, showers, drinking fountains, emergency eyewash showers and fountains, dog tubs and boot wash stations
Q. Plumbing piping, valve and equipment identification and labeling.
R. Cleaning, testing and adjusting of plumbing systems.
S. Seismic restraints at piping to meet codes.
T. Fire-stopping at pipe penetrations.

- Excludes:
    A. Specialized plumbing equipment.
    B. Kitchen and Culinary equipment packages.
    C. Salon equipment package.
    D. Grease interceptors at Kitchen and Culinary are included in the kitchen allowance.
    E. Natural gas meters and primary regulators for both the High School and Animal Science Building.
    F. Domestic water filtration systems.
    G. Oil/Gas separator (carried in Division 2)
    H. Trade permit – waived by Town of Dover
    I. Emergency/secondary roof drains

<u>Division 15 – Fire Protection</u>

15.02 Fire protection system:

- Includes:
    A. New shared water service entrances, 6" for the Animal Science building and 8" for the High School, including backflow prevention devices at both.
    B. Main piping is Schedule 40 grooved, steel pipe. Branch piping is Schedule 40 threaded, steel pipe.
    C. Dry pendant sprinkler heads at small exterior canopies, extended from the wet-based distribution system.
    D. Fire Department connections for new buildings (2)
    E. Seismic restraints at piping to meet codes
    F. Fire protection valve and equipment identification and labeling
    G. Fire-stopping at pipe penetrations

- Excludes:
  A. Fire pump(s).
  B. Ansul or specialty systems for protection of kitchen equipment.
  C. Trade permit – waived by Town of Dover
  D. Dry sprinkler system to 60-foot diameter horse-riding ring and the Animal Science Barn.

Division 15 – HVAC

15.03 HVAC system:

- Includes:
  A. (1) 35-ton, air-cooled chiller.
  B. (19) Rooftop HVAC units.
  C. (3) Make-Up Air Units
  D. (5) Heating and Ventilating units
  E. (1) Energy Recovery Unit
  F. (27) Ductless mini-split systems.
  G. (2) Kitchen exhaust fans.
  H. (4) 2500 MBH condensing NG boilers, main High School (per design team decision)
  I. (2) 399 MBH NG boilers, Animal Science.
  J. (4) Hot water pumps and (2) chilled water pumps.
  K. (13) 4ft. Fume hoods with exhaust fans.
  L. (1) Dust collection systems
  M. Horizontal ceiling mounted cabinet unit heaters
  N. Displacement ventilation diffusers.
  O. TRANE Tracer direct digital controls (DDC) to monitor building temperature – contingent upon TRANE equipment with factory mounted controls.
  P. Mechanical ductwork and piping, valve and equipment identification and labeling.
  Q. All general, round HVAC ductwork is pre-formed spiral duct. Most ductwork downstream of VAV boxes assumed to be round.
  R. Testing, adjusting and balancing with documentation of all HVAC systems.
  S. Seismic restraints at piping and ductwork systems to meet codes.
  T. Fire-stopping at pipe and ductwork penetrations.
  U. In-line sound attenuation for all rooftop equipment for all supply and return ducts
  V. Exhaust discharge hoods on all RTU's
  W. Ceiling mounted radiant panels
  X. 8" OD boiler breeching per manufacturer's data (12" OD shown on plans)
- Excludes:
  A. Specialty kitchen equipment
  B. Kitchen exhaust hood(s)
  C. Paint booth exhaust system.
  D. Vehicle exhaust systems.
  E. Base mounted fin tube radiation

F. Hot water supply/return piping to VAV boxes (per email from GGD engineers, dated 4/20/2016).
G. Trade permit – waived by Town of Dover
H. Boilers as scheduled on docs (smaller boilers were carried at SD)

Division 16 – Electrical

16.01 Electrical system:

- Includes:
  A. An allowance for electrical primary conductors and transformers.
  B. An allowance for relocating existing overhead power lines underground (by Animal Science building).
  C. An allowance of $375,000 for auditorium/theater lighting
  D. 1180 linear feet for primary length conduit(s) (2 – 5″ conduits).
  E. 115 linear feet for secondary service, duct bank w/(10) sets of (4)#600 MCM conductors in (10) 4″ conduits and (2) spare, 4″ conduits.
  F. (1) 4″ conduits for each of the following services: telephone, cable TV and fire alarm. Services will provide their own cables.
  G. (1) 4″ conduit for future ballfield circuit (no conductor, no spare)
  H. Extend the existing scoreboard circuit approximately 325 feet.
  I. (1) 4″ conduits to tennis courts and (1) to community garden (500 linear feet each)
  J. Recordable DVR system with interior and exterior cameras (See VE Log – B13).
  K. Site lighting. No exterior lighting was specified for the courtyard. It was agreed that specified site lighting fixtures would be down-graded to cover the cost for these additional fixtures.
  L. 1600 Amp feeder from MSBGC to MSB2 runs underground through the courtyard
  M. Feeders to panels 4DP1F and EP1F run underground through the courtyard
  N. Various panel feeders are embedded in slab (or beneath slab) versus overhead in ceiling
  O. Interior lighting and lighting controls.
     a. Per VE log, (49) LP8 fixtures were changed to LR24 fixtures in small offices, small group rooms and science prep rooms (See VE Log – A11).
  P. (3) 30kva and (1) 15kva UPS system.
  Q. A sound system for the cafeteria, music room and gymnasium.
  R. Tel/com system with cabling and devices.
  S. Fire alarm system.
  T. 350 kW and 80 kW NG generators with a sound attenuated, exterior enclosures.
  U. Security card reader system.
  V. Electrical equipment identification and labeling.
  W. Sealing and fire-stopping.
  X. Bi-directional antennae and Area of Refuge Assistance System
  Y. Master clock/Intercom system.

- Excludes:
  A. Nurse call system.
  B. Server racks.
  C. Primary conductors for new electrical service.
  D. Power and lighting systems for exterior athletic fields, courts and scoreboards.
  E. 'Back-fed' primary conduit/conductor from existing High School (2 - 5" conduits).
  F. Trade permit – waived by Town of Dover
  G. Lightning protection (See VE Log – B11).

# LIST OF DOCUMENTS

## Drawing List

A. Dover HS / Career Technical Center, Dover, NH; 100% Design Development Drawings, Volumes 1 and 2, March 15, 2016, HMFH Architects, Inc.
B. Updated Plumbing Drawings, March 31, 2016
C. Updated Site Civil Drawings, April 7, 2016
D. Revised Aggregate Pier Scope, April 15, 2016
E. CAD files, April 18, 2016
F. Updated Site Utility, April 26, 2016
G. Dover HS HVAC PDF Set, April 27, 2016, GGD Consulting Engineers

## Specifications

A. Dover High School & Career Technical Center, Dover, NH; Project Manual, HMFH Architect, Inc., Design Development, Volumes 1&2, March 18, 2016
B. Plumbing Fixture Spec, March 21, 2016, GGD Consulting Engineers

## Narratives

A. Dover High School & Regional Career Technical Center, Design Development Structural Narrative, March 15, 2016, Foley Buhl Roberts & Associates, Inc.
B. Report for Hazardous Materials Identification Survey at the High School and Vocational Career and Technical School, Dover, NH, Universal Environmental Consultants, January 16-22, 2015 and October 26-27, 2015
C. Foodservice Equipment List, Dover High School, Crabtree McGrath Associates, Inc., March 14, 2016

## Value Engineering Drawings

A. Revised Casework Drawings (16 0429 DRHS CW Markup.pdf)
B. Revised Hand Rail Elevations at Town Square (A12.10_INT ELEV TOWN SQUARE.pdf/ A12.11_INT ELEV TOWN SQUARE.pdf)
C. Revised Front Entry Elevation (A4.3.pdf)
D. Revised Front Entry Floor Plan (Entry Floor Plan.pdf)

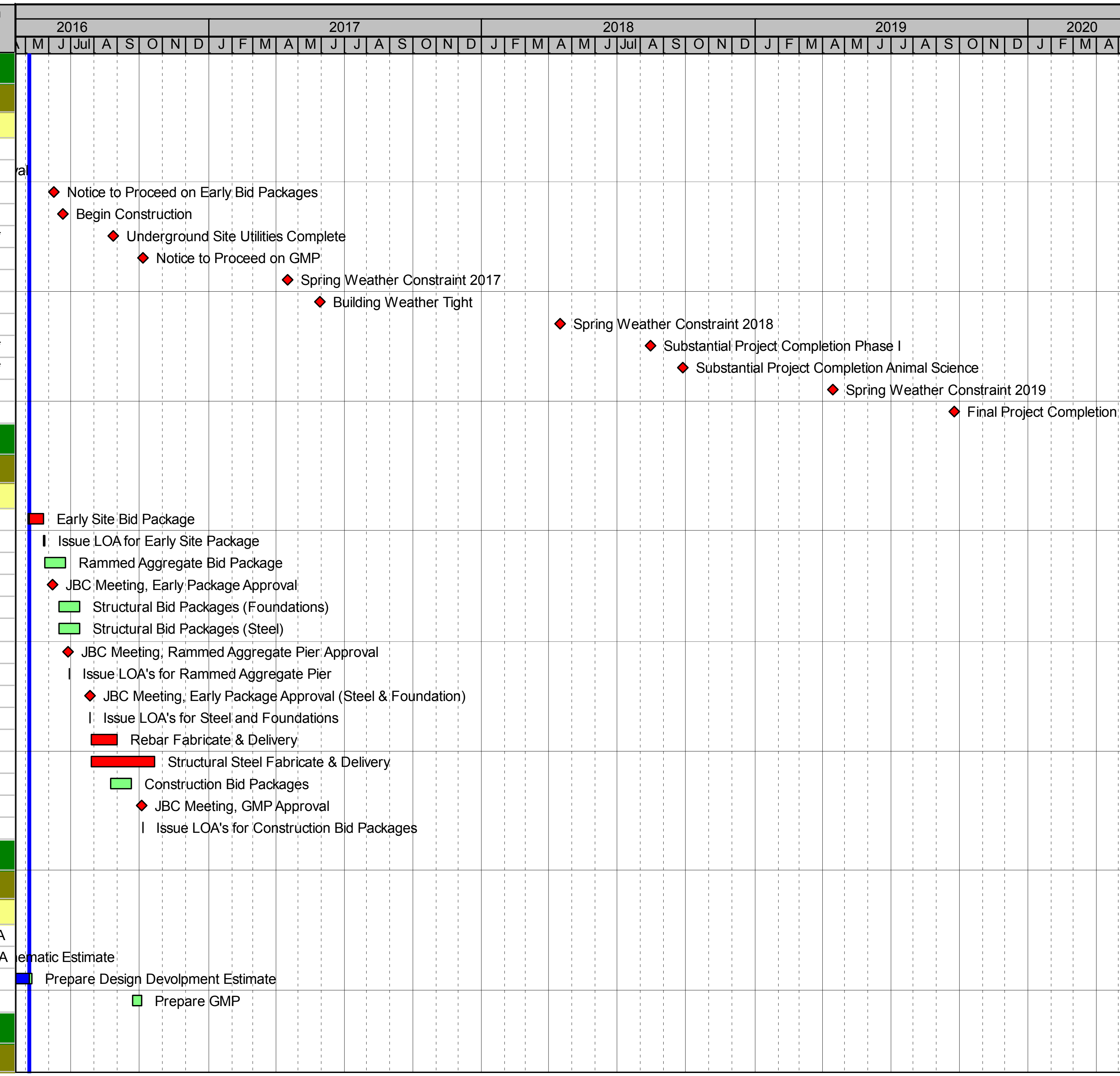
# ALTERNATES

| | | |
|---|---|---|
| C1 | Add two tennis courts | $87,360 |
| C2 | Add 1-1/2" overlay on Alumni Drive | $52,220 |
| C3 | Add softball field irrigation | $43,680 |
| C4 | Increase steel tonnage at remaining roof area to support photovoltaics on entire roof | $70,214 |
| C5 | Add climbing wall in lieu of relocating existing climbing wall | $33,376 |
| C6 | Add trees around building per Design Development documents | $94,712 |

# ALTERNATES WITH FUNDRAISING POTENTIAL

| | | |
|---|---|---|
| D1 | Add track to be installed summer of 2017 | $714,300 |
| D2 | Premium stage rigging (Increase current budget of $175,000 to target $545,000 | $370,000 |
| D3 | Premium Lighting and AV System (Increase current budget of $375,000 to target $450,000 | $75,000 |
| D4 | Turf field upgrade from XM6 2.25" to Cool Play 2.5" | $80,000 |
| D5 | Fundraise for all tree material costs excluding trees required at parking areas noted in VE Item B18. | $90,523 |

| Activity ID | Activity Description | Orig Dur | Early Start | Early Finish |
|---|---|---|---|---|
| ***Milestones*** | | | | |
| MI1000 | Notice of Award | 0 | 20-May-15 A | |
| MI1010 | City Council Budget Approval | 0 | 26-Aug-15 A | |
| MI1040 | Notice to Proceed on Early Bid Packages | 0 | 08-Jun-16 | |
| MI1020 | Begin Construction | 0 | 20-Jun-16* | |
| MI1998 | Underground Site Utilities Complete | 0 | | 26-Aug-16* |
| MI1050 | Notice to Proceed on GMP | 0 | 05-Oct-16 | |
| MI1055 | Spring Weather Constraint 2017 | 0 | 17-Apr-17* | |
| MI1030 | Building Weather Tight | 0 | | 30-May-17 |
| MI1065 | Spring Weather Constraint 2018 | 0 | 16-Apr-18* | |
| MI9995 | Substantial Project Completion Phase I | 0 | | 15-Aug-18* |
| MI1997 | Substantial Project Completion Animal Science | 0 | | 26-Sep-18* |
| MI1075 | Spring Weather Constraint 2019 | 0 | 15-Apr-19* | |
| MI9999 | Final Project Completion | 0 | | 23-Sep-19 |
| ***Project Management*** | | | | |
| ***Project Management - PCC*** | | | | |
| PC1060 | Early Site Bid Package | 20 | 04-May-16 A | 25-May-16 |
| PC1080 | Issue LOA for Early Site Package | 1 | 26-May-16 | 26-May-16 |
| PC1180 | Rammed Aggregate Bid Package | 20 | 27-May-16 | 24-Jun-16 |
| PC1160 | JBC Meeting, Early Package Approval | 0 | 07-Jun-16* | |
| PC1070 | Structural Bid Packages (Foundations) | 20 | 15-Jun-16 | 13-Jul-16 |
| PC1120 | Structural Bid Packages (Steel) | 20 | 15-Jun-16 | 13-Jul-16 |
| PC1190 | JBC Meeting, Rammed Aggregate Pier Approval | 0 | 28-Jun-16* | |
| PC1200 | Issue LOA's for Rammed Aggregate Pier | 1 | 29-Jun-16 | 29-Jun-16 |
| PC1170 | JBC Meeting, Early Package Approval (Steel & Foundation) | 0 | 26-Jul-16* | |
| PC1150 | Issue LOA's for Steel and Foundations | 1 | 27-Jul-16 | 27-Jul-16 |
| PC1130 | Rebar Fabricate & Delivery | 25 | 28-Jul-16 | 31-Aug-16 |
| PC1140 | Structural Steel Fabricate & Delivery | 60 | 28-Jul-16 | 20-Oct-16 |
| PC1090 | Construction Bid Packages | 20 | 23-Aug-16 | 20-Sep-16 |
| PC1210 | JBC Meeting, GMP Approval | 0 | 04-Oct-16* | |
| PC1100 | Issue LOA's for Construction Bid Packages | 1 | 05-Oct-16 | 05-Oct-16 |
| ***Pre-Construction*** | | | | |
| ***Project General*** | | | | |
| ***Estimating*** | | | | |
| PC1010 | Prepare Conceptual Estimate | 10 | 21-May-15 A | 23-Jun-15 A |
| PC1020 | Prepare Schematic Estimate | 15 | 12-Nov-15 A | 22-Dec-15 A |
| PC1030 | Prepare Design Devolpment Estimate | 15 | 15-Mar-16 A | 09-May-16 |
| PC1040 | Prepare GMP | 10 | 21-Sep-16 | 04-Oct-16 |
| ***Design*** | | | | |
| ***Design*** | | | | |




**Start Date** 20-May-15
**Finish Date** 23-Sep-19
**Data Date** 06-May-16
**Run Date** 10-May-16

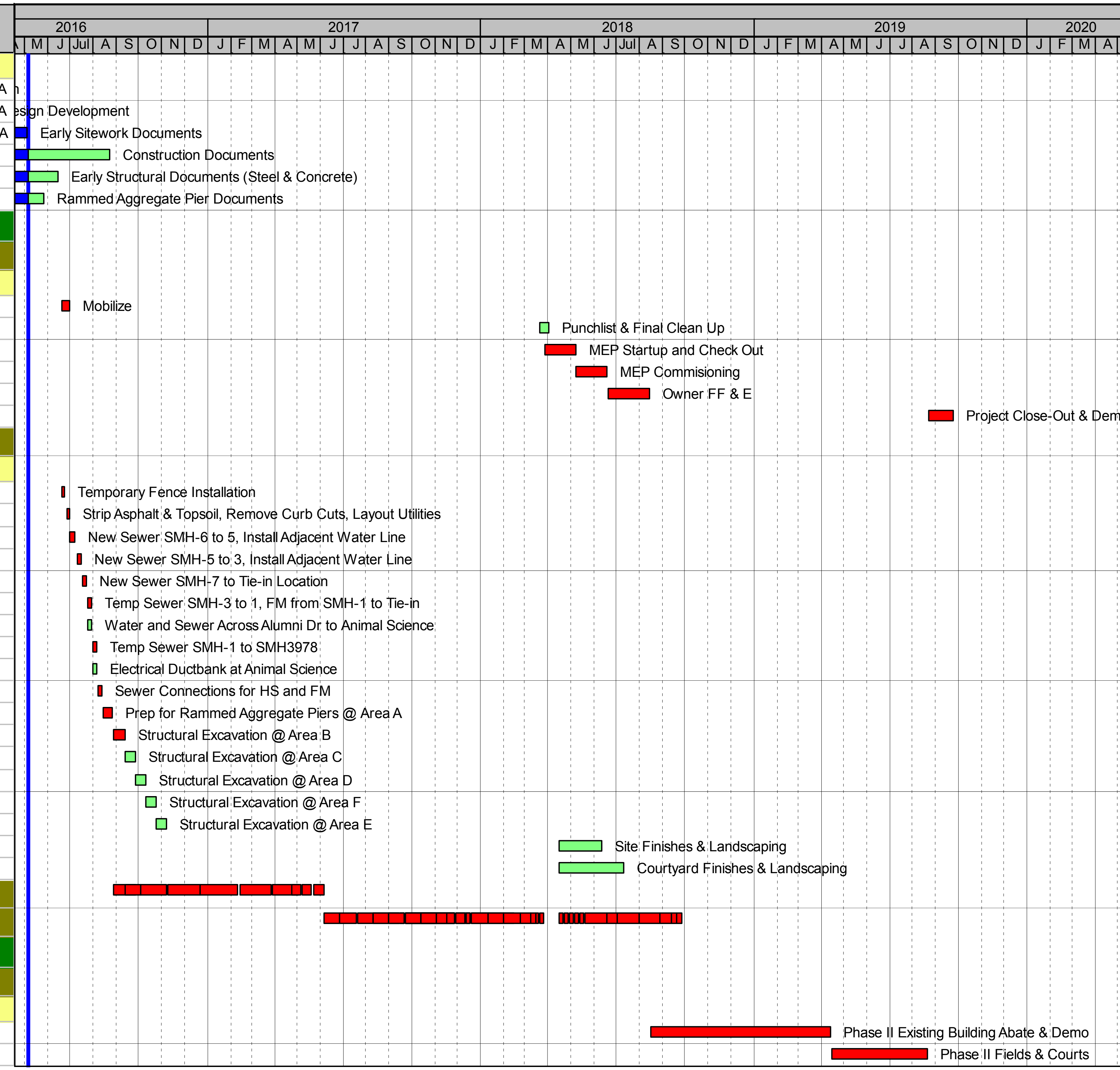
DHS3



**15027 - Dover High School - Dover, NH**
**Preliminary Early Work Schedule**

CONSTRUCTION

| Activity ID | Activity Description | Orig Dur | Early Start | Early Finish |
|---|---|---|---|---|
| DE1000 | Schematic Design | 75 | 03-Aug-15 A | 12-Nov-15 A |
| DE1010 | Design Development | 80 | 16-Nov-15 A | 15-Mar-16 A |
| DE1040 | Early Sitework Documents | 25 | 08-Feb-16 A | 04-May-16 A |
| DE1020 | Construction Documents | 109 | 16-Mar-16 A | 22-Aug-16 |
| DE1030 | Early Structural Documents (Steel & Concrete) | 67 | 14-Mar-16 A | 14-Jun-16 |
| DE1050 | Rammed Aggregate Pier Documents | 26 | 14-Mar-16 A | 26-May-16 |
| ***Construction*** | | | | |
| ***Project General*** | | | | |
| PG1000 | Mobilize | 10 | 20-Jun-16 | 01-Jul-16 |
| PG1100 | Punchlist & Final Clean Up | 10 | 20-Mar-18 | 02-Apr-18 |
| PG1210 | MEP Startup and Check Out | 30 | 27-Mar-18 | 07-May-18 |
| PG10005 | MEP Commisioning | 30 | 08-May-18 | 19-Jun-18 |
| PG1200 | Owner FF & E | 40 | 20-Jun-18 | 15-Aug-18 |
| PG9995 | Project Close-Out & Demobilization | 22 | 22-Aug-19 | 23-Sep-19 |
| ***Site Work*** | | | | |
| SI1000 | Temporary Fence Installation | 5 | 20-Jun-16 | 24-Jun-16 |
| SI1090 | Strip Asphalt & Topsoil, Remove Curb Cuts, Layout Utilities | 4 | 27-Jun-16 | 30-Jun-16 |
| SI1100 | New Sewer SMH-6 to 5, Install Adjacent Water Line | 5 | 01-Jul-16 | 08-Jul-16 |
| SI1110 | New Sewer SMH-5 to 3, Install Adjacent Water Line | 5 | 11-Jul-16 | 15-Jul-16 |
| SI1120 | New Sewer SMH-7 to Tie-in Location | 5 | 18-Jul-16 | 22-Jul-16 |
| SI1130 | Temp Sewer SMH-3 to 1, FM from SMH-1 to Tie-in | 5 | 25-Jul-16 | 29-Jul-16 |
| SI1150 | Water and Sewer Across Alumni Dr to Animal Science | 5 | 25-Jul-16 | 29-Jul-16 |
| SI1140 | Temp Sewer SMH-1 to SMH3978 | 5 | 01-Aug-16 | 05-Aug-16 |
| SI1160 | Electrical Ductbank at Animal Science | 5 | 01-Aug-16 | 05-Aug-16 |
| SI1170 | Sewer Connections for HS and FM | 5 | 08-Aug-16 | 12-Aug-16 |
| SI1010 | Prep for Rammed Aggregate Piers @ Area A | 10 | 15-Aug-16 | 26-Aug-16 |
| SI1020 | Structural Excavation @ Area B | 10 | 29-Aug-16 | 12-Sep-16 |
| SI1060 | Structural Excavation @ Area C | 10 | 13-Sep-16 | 26-Sep-16 |
| SI1050 | Structural Excavation @ Area D | 10 | 27-Sep-16 | 10-Oct-16 |
| SI1030 | Structural Excavation @ Area F | 10 | 11-Oct-16 | 24-Oct-16 |
| SI1040 | Structural Excavation @ Area E | 10 | 25-Oct-16 | 07-Nov-16 |
| SI1070 | Site Finishes & Landscaping | 40 | 16-Apr-18* | 11-Jun-18 |
| SI1080 | Courtyard Finishes & Landscaping | 60 | 16-Apr-18* | 10-Jul-18 |
| ***Building Foundation & Shell*** | | | | |
| ***Building Interior*** | | | | |
| ***Abatement, Demolition & Fields*** | | | | |
| AU2060 | Phase II Existing Building Abate & Demo | 164 | 16-Aug-18 | 12-Apr-19 |
| AU2070 | Phase II Fields & Courts | 90 | 15-Apr-19 | 21-Aug-19 |




| | |
|---|---|
| **Start Date** | **20-May-15** |
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DHS3



**15027 - Dover High School - Dover, NH**

**Preliminary Early Work Schedule**

CONSTRUCTION

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PC Construction Company
100% Employee Owned


**Headquarters**
193 Tilley Drive
South Burlington, VT 05403
802.658.4100

**Florida**
2525 Ponce de Leon Boulevard
Suite 300
Coral Gables, FL 33134
786.441.5190

**Georgia**
3232 Krisam Creek Drive
Suite 100
Loganville, GA 30052
678.691.4305

**Maine**
131 Presumpscot Street
Portland, ME 04103
207.874.2323

**New York**
2645 South Road
Suite 3
Poughkeepsie, NY 12601
845.765.6088

**North Carolina**
401 Hein Drive
Garner, NC 27529
919.661.9488

pcconstruction.com